SEQUENCE LISTING

<110> Lodes, Michael J.
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      Indirias, Carol Y.

<120> COMPOSITIONS AND METHODS FOR THE THERAPY
  AND DIAGNOSIS OF LUNG CANCER

<130> 210121.512

<140> US
<141> 2001-04-11

<160> 440

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 567
<212> DNA
<213> Homo sapien

<400> 1
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tccatttgtg gaggcagaaa aatctaacct tgcatatgat attgtgcagt tgcctacagg     480
attaacaggt ataaaggtga catatatgga ggaagagcga aattttacca ctgagcaagt     540
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<210> 2
<211> 413
<212> DNA
<213> Homo sapien

<400> 2
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tgcggaggtc tttgttgtgt tgcttctctg cattcccttc atttctccta aaagatggca     180
gaagattttc aagtcccggc tggtggagtt gttagtgtcc tatggcaaca ccttctttgt     240
ggttctcatt gtcatccttg tgctgttggt catcgatgcc gtgcgcgaaa ttcggaagta     300
tgatgatgtg acggaaaagg tgaacctcca gaacaatccc ggggccatgg agcacttcca     360
catgaagctt ttccgtgccc agaggaatct ctacattgct ggcttttcct tgc           413
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<210> 3
<211> 567
<212> DNA
<213> Homo sapien

<400> 3
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ctcgtccgat gctcaggaga gcttggaagt cgccatccag tgcctggaga ctgcgtttgg         180
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cgccgtctat ttctgcaaca gagccgcagc ctacagcaaa ctcggcaact acgcaggcgc         480
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gatgggcctg cgctcttca gcctcaa                                               567


<210> 4
<211> 454
<212> DNA
<213> Homo sapien

<400> 4
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agttgttgcc tgcaatctct atccctttgt aaagacagtg gcttctccag gtgtaactgt         360
tgaggaggct gtggagcaaa ttgacattgg tggagtaacc ttactgagag ctgcagccaa         420
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<210> 5
<211> 424
<212> DNA
<213> Homo sapien

<400> 5
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tgtcctccgt ccattgcgac catgccgcag atactctact tcaggcagct ctgggttgac         180
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acag                                                                       424


<210> 6
<211> 515
<212> DNA
<213> Homo sapien

<400> 6
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tacgtcttac aggagctgga taatccaggt gcaaacgaa ttctagagct tgaccagttt      180
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ctcagtgaag tgctgtgggt ctgtgccaac ctctttagtg atgtccaatt caagatgagt     300
cataagagga tcatgctgtt caccaatgaa gacaaccccc atggcaatga cagtgccaaa     360
gccagccggg ccaggaccaa agccggtgat ctccgagata caggcatctt ccttgacttg     420
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<210> 7
<211> 566
<212> DNA
<213> Homo sapien

<400> 7
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gtggcggccg gagcctcgaa aagagattct cagcgctgat tttgagatga tgggcttggg     180
aaacgggcgt cgcagcatga agtcgccgcc cctcgtgctg gccgccctgg tggcctgcat     240
catcgtcttg ggcttcaact actggattgc gagctcccgg agcgtggacc tccagacacg     300
gatcatggag ctggaaggca gggtccgcag ggcggctgca gagagaggcg ccgtggagct     360
gaagaagaac gagttccagg gagagctgga gaagcagcgg gagcagcttg acaaaatcca     420
gtccagccac aacttccagc tggagagcgt caacaagctg taccaggacg aaaaggcggt     480
tttggtgaat aacatcacca caggtgagag gctcatccga gtgctgcaag accagttaaa     540
gaccctgcag aggaattacg gcaggc                                          566
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<210> 8
<211> 515
<212> DNA
<213> Homo sapien

<400> 8
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gaattcggca cgagctgtcc tccttgcggg tgcggagatg gttgtcttgg ttacgggtcc      60
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agacgccttt ggtccctcgg tgtctgcact ggctgctggt caaggcttca gtgtggagta     180
attgacactt tcgagaatat taaaatcaaa ttagagaaga aaactgatcc ataataataa     240
aaatgtctcg aaaaatttca aaggagtcaa aaaaagtgaa catctctagt tctctggaat     300
ctgaagatat tagtttagaa acaacagttc ctacggatga tatttcctca tcagaagagc     360
gagagggcaa agtcagaatc accaggcagc taattgaacg aaaagactac ttcataatat     420
tcagttacta aaaattgagc tatcccagaa aactatgatg atcgacaatt tgaaagtgga     480
ttatcttaca aagattgaag aattggagga gaaac                                515
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<210> 9
<211> 415
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(415)
<223> n = A,T,C or G

<400> 9

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gaagaacaag aagagaacct tgaagcaagt ggagactata aatattcagg aagagatagt     180
ttgatttttt tggttgatgc ctccaaggct atgtttgaat ctcagagtga agatgagttg     240
acaccttttg acatgagcat ccagtgtatc caaagtgtgt acatcagtaa gatcataagc     300
agtgatcgag atctcttggc tgtggtgttc tatggtaccg agaaagacaa aaattcantg     360
aattttaaaa atatttacct cttacaggag ctggataatt caggtgcaaa acnaa          415
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<210> 10
<211> 565
<212> DNA
<213> Homo sapien

<400> 10
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gactgcagtt ctctatcctt cacacagctc tttcaccatg cctggatcac ttcctttgaa     120
tgcagaagct tgctggccaa aagatgtggg aattgttgcc cttgagatct attttccttc     180
tcaatatgtt gatcaagcag agttggaaaa atatgatggt gtagatgctg gaaagtatac     240
cattggcttg ggccaggcca agatgggctt ctgcacagat agagaagata ttaactctct     300
ttgcatgact gtggttcaga atcttatgga gagaaataac ctttcctatg attgcattgg     360
gcggctggaa gttggaacag agacaatcat cgacaaatca aagtctgtga agactaattt     420
gatgcagctg tttgaagagt ctgggaatac agatatagaa ggaatcgaca caactaatgc     480
atgctatgga ggcacagctg ctgtcttcaa tgctgttaac tggattgagt ccagctcttg     540
ggatggacgg tatgccctgg tagtt                                           565
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<210> 11
<211> 505
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(505)
<223> n = A,T,C or G

<400> 11
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gggattgcag gcctgggcgc cggggttgga ccagtctccc gggcatggca cgccctggtt     120
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cacggtcctc ggcaccagat gaggaaccac tgtctcaata agtgacacca gtgatgctgt     240
taaacaagga caatccggtt catggattgt gacaacgcac gctgacatca agcagaccct     300
gccgtcaggt acagagggca ccacagtgac caggaactgc tgtcctttca taccangttt     360
tangaggctt taccanaagg aatggaaaat gctggtgggc aagtaagatt gaaacagcat     420
ctgaggactg gttctgcaca aaaccttaaa ttcttcaagg actttgacat ttgtttattc     480
ttgtaacaaa ttaaaaccta ttctt                                           505
```

<210> 12
<211> 513
<212> DNA
<213> Homo sapien

<400> 12
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cgcgcccccg gggccggtcc cggagggctc gatccgcatc tacagcatga ggttctgccc     120
```

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gtttgctgag aggacgcgtc tagtcctgaa ggccaaggga atcaggcatg aagtcatcaa      180
tatcaacctg aaaaataagc ctgagtggtt cttttaagaaa aatcccttttg gtctggtgcc     240
agttctggaa aacagtcagg gtcagctgat ctacgagtct gccatcacct gtgagtacct      300
ggatgaagca tacccaggga agaagctgtt gccggatgac ccctatgaga aagcttgcca      360
gaagatgatc ttagagttgt tttctaaggt gccatccttg gtaggaagct ttattagaag      420
ccaaaataaa gaagactatg atggcctaaa agaagaattt cgtaaagaat ttaccaagct      480
agaggaggtt ctgactaata agaagacgac ctt                                   513
```

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<210> 13
<211> 375
<212> DNA
<213> Homo sapien
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<220>
<221> misc_feature
<222> (1)...(375)
<223> n = A,T,C or G
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<400> 13
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cctcgcgggc cgccgggtgc tggtcaccgg ggcaggcaaa ggtatagggc gcggcacggt      120
ccaggcgctg cacgcgacgg gcgcgcgggt ggtggctgtg agccggactc aggcggatct      180
tgacagcctt gtccgcgagt gcccggggat agaacccgtg tgcgtggacc tgggtgactg      240
ggaggccacc gancgggcgc tgggcaacgt gggccccgtg gacctgctgg tgaacaacgc      300
ccctgtcccc tgcttcaacc ctttctggaa gtcaccaaag aagccttttga cagatccttt     360
taagtgaacc tgctg                                                        375
```

```
<210> 14
<211> 298
<212> DNA
<213> Homo sapien
```

```
<400> 14
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taatatagga aggtgttctt taggtatgtt acaggattac tttaaaccat ttgactttcg      120
ctccaaagtt atgttggtag tatagcaaat tatgatgaat agctttaatt gtatgtttaa      180
aagtctcata tgttcacatg cttaaatctg ggtatcagaa tttaagcaat tcttgaaatg      240
tattgtctcc ttaatatact aattacaaag caaaaaaaaa aaaaaaaaa aactcgag         298
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<210> 15
<211> 506
<212> DNA
<213> Homo sapien
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<220>
<221> misc_feature
<222> (1)...(506)
<223> n = A,T,C or G
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<400> 15
gaattcggca cgagccggcg aggaatagga atcatggcgg ctgcgctgtt cgtgctgctg       60
ggattcgcgc tgctgggcac ccacggagcc tccggggctg ccggcacagt cttcactacc      120
gtagaagacc ttggctccaa gatactcctc acctgctcct tgaatgacag cgccacagag      180
gtcacagggc accgctggct gaaggggggc gtggtgctga ggaggacgc gctgcccggc      240
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cagaaaacgg agttcaaggt ggactccgac gaccagtggg gagagtactc ctgcgtcttc          300
ctccccgagc ccatgggcac ggccaacatc cagctccacg ggcctcccan agtgaaaggt          360
tgtgaagtcg tcaagaacac atcaacgagg gggagacggc catgctggtc tgcaagtcag          420
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acaaggccct tattgaaccg gcttcc                                               506


<210> 16
<211> 286
<212> DNA
<213> Homo sapien


<400> 16
gaattcggca cgagctttta aggagaaaat gtgacacttg tgaaaaagct tgtaagaaag           60
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tttattttttg ctttgttttt aatgaacatt tgtctttcag aataggattg tgtgataatg         180
tttaaatggc aaaaacaaaa catgattttg tgcaattaac aaagctactg caagaaaaat          240
aaaacacttc ttggtaacac aaaaaaaaaa aaaaaaaaaa ctcgag                         286


<210> 17
<211> 387
<212> DNA
<213> Homo sapien


<220>

<221> misc_feature
<222> (1)...(387)
<223> n = A,T,C or G


<400> 17
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gggaggctag agatcatgga agggaagtgg ttgctgtgta tgttactggt gcttggaact          120
gctattgttg aggctcatga tggacatgat gatgatgtga ttgatattga ggatgacctt          180
gacgatgtca ttgaagaggt agaagactca aaaccagata ccactgctcc tccttcatct          240
cccaaggtta cttacaaagc tccagttcca acaggggaag tatattttgc tgattctttt          300
gacagaggaa ctctgtcagg gtggatttta tccaaagcca agaaagacna tcccgatgat          360
gaaattgcca aatatgatgg aaagtgg                                              387


<210> 18
<211> 415
<212> DNA
<213> Homo sapien


<400> 18
gaattcggca cgagccaaag tgagcagtag ccaacatgtc agggtgggag tcatattaca           60
aaaccgaggg cgatgaagaa gcagaggaag aacaagaaga gaaccttgaa gcaagtggag          120
actataaata ttcaggaaga gatagtttga ttttttttggt tgatgcctcc aaggctatgt         180
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gtacccgaga aagacaaaaa ttcagtgaat tttaaaaata tttacgtctt acaggagctg          360
gataatccag gtgcaaaacg aattctagac tttgccagtt taaggggcag caggg              415


<210> 19
<211> 466
<212> DNA
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<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(466)
<223> n = A,T,C or G

<400> 19
gaattcggca cnagcgggga tcggtcgcct gagaggtatc acctcttctg ggctcaagat   60
ggacaacaag aagcgcctgg cctacgccat catccagttc ctgcatgacc agctccggca   120
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<210> 20
<211> 296
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(296)
<223> n = A,T,C or G

<400> 20
gaattcggca cnaggtggtg tgtggctgcg gcctgggcaa gagccgccgc ggaccatgag   60
ctgagtaagt tctggaggga tcctgcctct tggagccttc gcagccaggc agctgtgaac   120
tgtgagctag agtgaagcag aaatctagga agatgagctc caagatggtc ataagtgaac   180
caggactgaa ttgggatatt tcccccaaaa atggccttaa gacattttc tctcagaaaa   240
ttataaagat cattccatgg cttccaagtt taaaaagaac ttacgtggtt tttatc   296

<210> 21
<211> 328
<212> DNA
<213> Homo sapien

<400> 21
gaattcggca cgagcccgcg ctgcacttgc tcgccgcgtg actggaggac cgagccccca   60
cattttcttt atgtggttgt ggtggggggca cagtaatgcc ctgtgcgccg tagcgttcct   120
gtggggatgt ggccgggggg cgtcgggaag cgtcactgct tgatgtccga gctcagcgat   180
gaagccagcg agccggaact cctgaaccgc agcttgtcca tgtggcacgg gctcgggaca   240
caggtcagcg gggaggagct ggatgtcccc ctggatcttc acacagctgc ttcattggcc   300
agtatgaagt ggtgaaggaa tgtgtgca   328

<210> 22
<211> 466
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature

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<222> (1)...(466)
<223> n = A,T,C or G


<400> 22
gaattcggca cgaggcggac taataaaggc catggcgcca gcagaaatcc tgaacgggaa      60
ggagatctcc gcgcaaataa gggcgagact gaaaaatcaa gtcactcagt tgaaggagca     120
agtacctggt ttcacaccac gcctggcaat attacaggtt ggcaacagag atgattccaa     180
tctttatata aatgtgaagc tgaaggctgc tgaagagatt gggatcaaag ccactcacat     240
taagttacca agaacaacca cagaatctga ggtgatgaag tacattacat ctttgaatga     300
agactctact gtacatgggt tcttagtgca gctacctta gattcagaga attccattaa      360
cactgaagaa gtgatcaatg ctattgcacc cganaaggat gtggatggat tgactagcat     420
caatgctggg aaacttgcta gaggtgacct caatgactgt ttcatt                    466


<210> 23
<211> 517
<212> DNA
<213> Homo sapien


<220>
<221> misc_feature
<222> (1)...(517)
<223> n = A,T,C or G


<400> 23
gaattcggca cgagcagagg tctccagagc cttctctctc ctgtgcaaaa tggcaactct      60
taaggaaaaa ctcattgcac cagttgcgga agaagaggca acagttccaa acaataagat     120
cactgtagtg ggtgttggac aagttggtat ggcgtgtgct atcagcattc tgggaaagtc     180
tctggctgat gaacttgctc ttgtggatgt tttggaagat aagcttaaag gagaaatgat     240
ggatctgcag catggagct tatttcttca gacacctaaa attgtggcag ataaagatta      300
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ggagagtcgg ctcaatctgg tgcagagaaa tgttaatgtc ttcaaattca ttattcctca     420
gatcgtcaag tacagtcctg attgcatcat aattgtggnt ccaacccag tggacattct      480
tacgtatgtt acctggaaac taagtggatt acccaaa                              517


<210> 24
<211> 196
<212> DNA
<213> Homo sapien


<400> 24
gaattcggca cgagggtggc actatgtggc gcgtctgtgc gcgacgggct cagaatgtag      60
ccccatgggc gggactcgag gctcggtgga cggccttgca ggaggtaccc ggaactccac     120
gagtgacctc gcgatctggc ccggctcccg ctcgtcgcaa cagcgtgact acagggtatg     180
gcggggtccg ggcact                                                     196


<210> 25
<211> 365
<212> DNA
<213> Homo sapien


<220>
<221> misc_feature
<222> (1)...(365)
<223> n = A,T,C or G
```

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<400> 25
gaattcggca cgaggttggg cggtgctggt ttttcgctcg tcgactgcgg ctcttcctcg    60
ggcagcggaa gcggcgcggc ggtcggagaa gtggcctaaa acttcggcgt tgggtgaaag   120
aaaatggccc gaaccaagca gactgctcgt aagtccaccg gtgggaaagc cccccgcaaa   180
cagctggcca cgaaagccgc caggaaaagc gctccctcta ccggcggggt gaagaagcct   240
catcgctaca ggcccgggac cgtggcgctt cganagattc gtcgttatca gaagtcgacc   300
gagctgctca tccggaagct gcccttccag angttggtga gggagatcgc gcaggatttc   360
aaaac                                                              365


<210> 26
<211> 321
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(321)
<223> n = A,T,C or G

<400> 26
ctcgagtttt tttttttttt ttttttttgta cgaaatggct aagtttattc aacatctcgg    60
atattcatct ggatattggg tttgttttgt gatacaatac atattcacct taactggtgc   120
tactgcaaag aaagctttct tgacctgcat gacgtgcctc anagcttctc tccaccaatt   180
ggaaccaccc aaagcctagt ctanaccaaa gtgctctgga gaaaaaaaac aaaacaaaaa   240
aacagcaaac agaaaacagt tgtgcccccа aaagtactca gaagtcatat gttatttaca   300
attgggtttg tgtgggatgg g                                             321


<210> 27
<211> 454
<212> DNA
<213> Homo sapien

<400> 27
gaattcggca cgagcaagga tgaggagaac aatccccttg agacagaata tggcctttct    60
gtctacaagg atcaccagac catcaccatc caggagatgc cggagaaggc cccagccggc   120
cagctccccc gctctgtgga cgtcattctg gatgatgact tggtggataa agcgaagcct   180
ggtgaccggg ttcaggtggt gggaacctac cgttgccttc ctggaaagaa gggaggctac   240
acctctggga ccttcaggac tgtcctgatt gcctgtaatg ttaagcagat gagcaaagga   300
tgctcagccc tctttctctg ctgaggatat agccaagatc aagaagttca gtaaaacccg   360
atccaaggat atctttgacc atctggccaa gtcattggcc ccaagtatcc atgggcatga   420
ctatgtcaag aaagcaatcc tctgcttgct cttg                               454


<210> 28
<211> 285
<212> DNA
<213> Homo sapien

<400> 28
gaattcggca cgaggttggt ctgaaattca tgcaagcttc cgaagatctt ctcaaggaac    60
actacgttga cctgaaggac cgtccattct ttgccggcct ggtgaaatac atgcactcag   120
ggccggtagt tgccatggtc tgggagggggc tgaatgtggt gaaaacgggc cgagtcatgc   180
tcggggagac caaccctgca gactccaagc ctgggaccat ccgtggagac ttctgcatac   240
aagttggcag gaacattata catggcagtg attctgtgga gagtg                   285
```

```
<210> 29
<211> 512
<212> DNA
<213> Homo sapien

<400> 29
gaattcggca cgagcaacct tgtaaatgtg aaagtacaac tcgtatttat ctctgatgtg      60
ccgctggctg aactttgggt tcatttgggg tcaaagccag ttttcttttt aaaattgaat     120
tcattctgat gcttggcccc cataccccca accttgtcca gtggagccca acttctaaag     180
gtcaatatat catcctttgg catcccaact aacaataaag agtaggctat aagggaagat     240
tgtcaatatt ttgtggtaag aaaagctaca gtcatttttt ctttgcactt ggatgctga      300
aatttttccc atggaacata gccacatcta gatagatgtg agctttttct tctgttaaaa     360
ttattcttaa tgtctgtaaa aacgattttc ttctgtagaa tgtttgactt cgtattgacc     420
cttatctgta aaacacctat ttgggataat atttggaaaa aaagtaaata gctttttcaa     480
aatgaaaaaa aaaaaaaaaa aaaaactcg ag                                    512

<210> 30
<211> 464
<212> DNA
<213> Homo sapien

<400> 30
gaattcggca cgaggccagg tgggcagccc gcggaccgac ccctactcgg cggcgcaact      60
ccacaaccag tacggcccca tgaatatgaa catgggtatg aacatggcag cagccgcggc     120
ccaccaccac caccaccacc accaccaccc cggtgccttt ttcccgctat atgcggcagc     180
agtgcatcaa gcaggagcta atctgcaagt ggatcgaccc cgagcaactg agcaatccca     240
agaagagctg caacaaaact ttcagcacca tgcacgagct ggtgacacac gtctcggtgg     300
agcacgtcgg cggcccggag cagagcaacc acgtctgctt ctgggaggag tgtccgcgcg     360
agggcaagcc cttcaaggcc aaatacaaac tggtcaacca catccgcgtg cacacaggcg     420
agaaaccctt cccctgcccc ttcccgggct gtggcaaagt cttc                      464

<210> 31
<211> 317
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(317)
<223> n = A,T,C or G

<400> 31
gaattcggca cgagcagagg tgagcaagct ggaacagcaa tgccagaagc agcaggagca      60
ggctgacagc ctggaacgca gcctcgaggc tgagcgggcc tcccgggctg agcgggacag     120
tgctctggag actctgcagg gccagttaga ggagaaggcc cangagctag ggcacagtca     180
gagtgcctta gcctcggccc aacgggagtt ggctgccttc cgcaccaagg tacaagacca     240
cagcaaggct gaagatgagt ggaaggccca gttggcccgg ggccggcaag aggctganag     300
gaaaaatagc ctcatca                                                    317

<210> 32
<211> 275
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(275)
<223> n = A,T,C or G

<400> 32
gaattcggca cgagcgaagg aggacggagg cttcagacac tcggaagcct ttgaggcact    60
ccagcaaaag agtcagggac tggactccag gctccagcac gtggaggatg gggtgctctc   120
catgcaggtg gcttctgcgc gccagaccga gagcctggag tccctcctgt ncaagagcca   180
ggagcacgag cagcgcctgg ccgccctgca ggggcgcctg gaaggcctcg ggtcctcata   240
ggcanaccan gatggcctgc cagcacggtg aggag                             275


<210> 33
<211> 516
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(516)
<223> n = A,T,C or G

<400> 33
gaattcggca cgagggggcc tgggcgttga ctgtgggaaa ctcggaaaca agctcacatc    60
ttcctgtggg aaaccttcta gcaacaggat gagtctgcag tggactgcag ttgccacctt   120
cctctatgcg gaggtctttg ttgtgttgct tctctgcatt tccttcattt ctcctaaaag   180
atggcagaag attttcaagt cccggctggt ggagttgtta gtgtcctatg gcaacacctt   240
ctttgtggtt ctcattgtca tccttgtgct gttggtcatc gatgccgtgc gcgaaattcg   300
gaagtatgat gatgtgacgg aaaaggtgaa cctccagaac aatcccgggg ccatggagca   360
cttccacatg aagnttttcc gtgcccagag gaatctctac attgctggct tttccttgct   420
gctgtccttc ctgcttagac gcctggtgac tctcatttcc aacaggccac gctgctggcc   480
ttcaatgaac ctttaaaaac aggcggagag tnctat                            516


<210> 34
<211> 446
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(446)
<223> n = A,T,C or G

<400> 34
gaattcggca cgagacagaa atgnctaaag aagagaagga ccctggaatg ggtgcaatgg    60
gtggaatggg aggtggtatg ggaggtggca tgttctaact cctagactag tgctttacct   120
ttattaatga actgtgacag gaagcccaag gcagtgttcc tcccaataac ttcagagaag   180
tcanttggag aaaatgaaga aaaaggctgg ctgaaaatca ctataaccat cagttactgg   240
tttcagttga caaaatatat aatggtttac tgctgtcatt gtccatgcct acagataatt   300
tattttgtat ttttgaataa aaaacatttg tacattcctg atactgggta caagagccat   360
gtaccagtgt actgctttca acttaaatca ctgaggcatt tttactacta ttctgttaaa   420
atcaggattt tagtgcttgc ccccca                                        446
```

<210> 35
<211> 440
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(440)
<223> n = A,T,C or G

<400> 35
```
gaattcggca cgaggtttat ttgtccccac cagaaggttg gggtgggcgg gcctagaaca      60
cagcgtgcgg cgggttcccg ggtggagcca gcgcagacag cgtgggtccc tgcggctctt     120
angcgaaggt ggagttgttc cancccacat tggcccgcgt ttcattgtcg taatagttga     180
tgtagaccct gtccgggctg atgcgcaggc gctctgccag caggccgcac agcagcttgc     240
tgtaggagcg gttctgcgcg ccgccgatct tgccgatgct gtgcangctg canagcgcgc     300
acggctcgct ggagccgccg aaggccatga gctggtccgg gaccacgtgc accgctatgt     360
actgggggggg cttgccggtg gcctgcgcca nctgctgggt gagctcggag aggaaccgtc     420
cggcacggag gcgcggggca                                                 440
```

<210> 36
<211> 373
<212> DNA
<213> Homo sapien

<400> 36
```
gaattcggca cgaggccaaa cgtaccaaga aagtcgggat cgtcggtaaa tacgggaccc      60
gctatggggc ctccctccgg aaaatggtga agaaaattga aatcagccag cacgccaagt     120
acacttgctc tttctgtggc aaaaccaaga tgaagagacg agctgtgggg atctggcact     180
gtggttcctg catgaagaca gtggctggcg gtgcctggac gtacaatacc acttccgctg     240
tcacggtaaa gtccgccatc agaagactga aggagttgaa agaccagtag acgctcctct     300
actctttgag acatcactgg cctataataa atgggttaat ttatgtaaca aaaaaaaaaa     360
aaaaaaactc gag                                                        373
```

<210> 37
<211> 565
<212> DNA
<213> Homo sapien

<400> 37
```
gaattcggca cgagggggca cgggcacccc cgcggtcccc gggaggctag agatcatgga      60
agggaagtgg ttgctgtgta tgttactggt gcttggaact gctattgttg aggctcatga     120
tggacatgat gatgatgtga ttgatattga ggatgacctt gacgatgtca ttgaagaggt     180
agaagactca aaaccagata ccactgctcc tccttcatct cccaaggtta cttacaaagc     240
tccagttcca acaggggaag tatattttgc tgattctttt gacagaggaa ctctgtcagg     300
gtggatttta tccaaagcca agaaagacga taccgatgat gaaattgcca aatatgatgg     360
aaagtgggag gtagaggaaa tgaaggagtc aaagcttcca ggtgataaag gacttgtgtt     420
gatgtctcgg gccaagcatc atgccatctc tgctaaactg aacaagccct tcctgtttga     480
caccaagcct ctcttgttca gtatgaggtt aatttccaaa atggaataga atgtggtggt     540
gcctatgtga aactgctttc taaaa                                           565
```

<210> 38
<211> 566
<212> DNA

<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(566)
<223> n = A,T,C or G

<400> 38
```
gaattcggca cgagcccaac tttagccagg aagatcagca ggacacccag atttatgaga      60
agcatgacaa ccttctacat gggaccaaga agaaaaagga gaagatggtg agtgcagcat     120
tcatgaagaa gtacatccat gtggccaaaa tcatcaagcc tgtcctgaca caggagtcgg     180
ccacctacat tgcagaagag tattcacgcc tgcgcagcca ggatagcatg agctcagaca     240
ccgccaggac atctccagtt acagcccgaa cactggaaac tctgattcga ctggccacag     300
cccatgcgaa ggcccgcatg agcaagactg tggacctgca ggatgcagag gaagctgtgg     360
agttggtcca gtatgcttac tttaagaagg ttctggagaa ggagaagaaa cgtaagaagc     420
gaagtgagga tgaatcagag acagaagatg aagaggagaa aagccaagag gaccaggagc     480
agaagaggaa gagaaggaag actcgccagc cagatgccaa agatggggat tcatacgacc     540
cctatgactt cagtgacaca gaggan                                         566
```

<210> 39
<211> 364
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(364)
<223> n = A,T,C or G

<400> 39
```
gaattcggca cgaggtctca cagaaagttc tccgctccca gacatgggtc cctcggcttc      60
ctgcctcgga agcgcagcag caggcatcgt gggaaggtga agagcttccc taaggatgac     120
ccgtccaagc cggtccacct cacagccttc ctgggataca aggctggcat gactcacatc     180
gtgcgggaag tcgacaggcc gggatccaag gtgaacaaga aggaggtggt ggaggctgtg     240
accattgtag agacaccacc catggtggtt gtgggcattg tggctacgt ggaaacccct     300
ngaggcctcc ggacctttaa gactgtcttt gcttgagcac atcantgatg aatgcaagag     360
gcgt                                                                 364
```

<210> 40
<211> 336
<212> DNA
<213> Homo sapien

<400> 40
```
gaattcggca cgagcccaga tctcctaccc agcctcccag ggggcctact acatccctgg      60
acagggcgt tccacatacg ttgtcccgac acagcagtac cctgtgcagc caggagcccc     120
aggcttctat ccaggtgcaa gccctacaga atttgggacc tacgctggcg cctactatcc     180
agcccaaggg gtgcagcagt ttcccactgg cgtggccccc gccccagttt tgatgaacca     240
gccaccccag attgctccca agagggagcg taagacgatc cgaattcgag atccaaacca     300
aggaggaaag gatatcacag aggagatcat gtctgg                              336
```

<210> 41
<211> 566
<212> DNA

<213> Homo sapien

<400> 41
```
gaattcggca cgagacttgg gaaaatgaat tcagaggagg aagatgaagt gtggcaggtg      60
atcataggag ccagagctga gatgacttca aaacaccaag agtacttgaa gctggaaacc     120
acttggatga ctgcagttgg tctttcagag atggcagcag aagctgcata tcaaactggc     180
gcagatcagg cctctataac cgccaggaat cacattcagc tggtgaaact gcaggtggaa     240
gaggtgcacc agctctcccg gaaagcagaa accaagctgg cagaagcaca gatagaagag     300
ctccgtcaga aaacacagga ggaaggggag gagcgggctg agtcggagca ggaggcctac     360
ctgcgtgagg attgagggcc tgagcacact gccctgtctc cccactcagt ggggaaagca     420
ggggcagatg ccaccctgcc cagggttggc atgactgtct gtgcaccgag aagaggcggc     480
aggtcctgcc ctgccaatca ggcgagacgc ctttgtgagc tgtgagtgcc tcctgtggtc     540
tcaggcttgc gcttggacct ggttct                                          566
```

<210> 42
<211> 386
<212> DNA
<213> Homo sapien

<400> 42
```
gaattcggca cgagggcagc tcgagtccac cagcagcgcc gtccgcttga ccgagatgct      60
gcgggcctgt cagttatcgg gtgtgaccgc cgccgcccag agttgtctct gtgggaagtt     120
tgtcctccgt ccattgcgac catgccgcag atactctact tcaggcagct ctgggttgac     180
tactggcaaa attgctggag ctggcctttt gtttgttggt ggaggtattg gtggcactat     240
cctatatgcc aaatgggatt cccatttccg gggaaagtgta gagaaaacca taccttactc     300
agacaaactc ttcgagatgg ttcttggtcc tgcagcttat aatgttccat tgccaaagaa     360
atcgattcaa gtcgggtcca ctaaaa                                          386
```

<210> 43
<211> 514
<212> DNA
<213> Homo sapien

<400> 43
```
gaattcggca cgagggcaaa acctccacct cctgatgaat ttcttgactg tttccaaaag      60
tttaaacacg gatttaacct tctggccaaa ctgaagtctc atattcagaa tcctagtgct     120
gcagatttgg ttcacttttt gtttactcca ttaaatatgg tggtgcaggc aacaggaggt     180
cctgaactag ccagttcagt acttagtccc ctattgaata aggacacaat tgatttctta     240
aattatactg tcaatggtga tgaacggcag ctgtggatgt cattgggagg aacttggatg     300
aaagccagag cagagtggcc aaaagaacag tttattccac catatgttcc acgattccgc     360
aatggctggg agcccccaat gctgaacttt atgggagcca caatggaaca agatctttat     420
caactggcag aatctgtggc aaatgtagca gaacatcagc gcaaacagga aataaaaaga     480
ttatcccaga gcatttcagt gtatcagaat atta                                 514
```

<210> 44
<211> 467
<212> DNA
<213> Homo sapien

<400> 44
```
gaattcggca cgagactaga gccgcatcac atggggactt ctgcaaatac agagactcgg      60
attaaaggtg gagaagatgg agctaaagga actgcttatt taatacattt gaacaacttt     120
tggggtactt agaaggtgct ttgaaacctg catttgatta agcaagaatt cgcttgcaag     180
ttaaggggca ctccacagaa ggatgttatt atcaagtcag atgcaccgga cactttgtta     240
```

```
ttggagaaac atgcagatta tatcgcatcc tatggctcaa agaaagatga ttatgaatac    300
tgtatgtctg agtatttgag aatgagtggc atctattggg gtctgacagt aatggatctc    360
atgggacaac ttcatcgcat gaatagagaa gagattctgg catttattaa gtcttgccaa    420
catgaatgtg gtggaataag tgctagtatc ggacatgatc ctcatct                  467
```

<210> 45
<211> 344
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(344)
<223> n = A,T,C or G

```
<400> 45
gaattcggca cgagggagac tggaggaaga gctccgccag ctgaagtccg attcccacgg     60
gccgaaggag gacggaggct tcagacactc ggaagccttt gaggcactcc agcaaaagag    120
tcagggactg gactccaggc tccagcacgt ggaggatggg gtgctctcca tgcaagtggc    180
ttctgcgcgc cagaccgaga gcctggagtc cctcctgtcc aagaaccagg aacacgagca    240
gcgcctggcc gcctgcaggg gcgcctggaa agcctcgggt cctcagaagc agaccangat    300
ggcctgccag cacngtgagg agcctgggcg agacccagct ggtg                     344
```

<210> 46
<211> 303
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(303)
<223> n = A,T,C or G

```
<400> 46
gaattcggca cgagngggaa cacaagtatg tgccaccaca ccttggtaac ttttaaattg     60
tttttagata tgaggtctga ccatgttgcc catgccatta ttattccttt tgataaaggt    120
gaatttaggc taaactgtga aagaatgtac agcaaatggc tctgttaatt cttctcatag    180
gaggacaggt tactgttaat agagaacata tgtatgtaat ggctaaaaat agggcagtag    240
aaaaggaatg taacttctca cctcctttga gaatgnaaag aaagaaagaa aaaggatgg     300
tac                                                                   303
```

<210> 47
<211> 364
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(364)
<223> n = A,T,C or G

```
<400> 47
gaattcggca cgaganatag ttcctttctc taaagtggat gaggaacaaa tgaaatataa     60
atcggagggg aagtgcttct ctgttttggg attttgtaaa tcttctcagg ttcagagaag    120
```

```
attcttcatg ggaaatcaag ttctaaaggt ctttgcagca agagatgatg aggcagctgc      180
agttgcactt tcctccctga ttcatgcttt ggatgactta gacatggtgg ccatagttcg      240
atatgcttat gacaaaagag ctaatcctca agtcggcgtg gcttttcctc atatcaagca      300
taactatgag tgtttagtgt atgtgcagct gcctttcatg gaagacttgc ggcaatacat      360
gttt                                                                    364


<210> 48
<211> 284
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(284)
<223> n = A,T,C or G

<400> 48
gaattcggca cgagagcagc tggaggcact ggagaaggag aaggctgcca agctggagat       60
tctgcagcag caacttcagg tggctaatga agcccgggac agtgcccaga cctcagtgac      120
acaggcccag cgggagaagg cagagctgag ccggaaggtg gaggaactcc aggcctgtgt      180
tgagacagcc cgccaggaac agcatgaggc ccaggcccag gttgcagagc tagagttgca      240
gctgcggtct gagcagcaaa aagcaactga ganagaaagg gtgg                      284


<210> 49
<211> 313
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(313)
<223> n = A,T,C or G

<400> 49
gaattcggca cgaggtttat tatagctcat acctgggacc gattaaggtg tcaacatttt       60
aaaattactc aagatattaa ccagaaaaga tgattatggc ctttaaaact attggacaaa      120
ctgatgctat ttaacattgt tcacagccat ttaatttgaa taacaaattt tagattctaa      180
gtaggccata acttctttgc aaaacaattg atttataaag gtacagtttc agaaggnaac      240
agcatgagac tagtcttcct ataggcacat tttagtagac tgctcttctc atccctggtc      300
aaggagcttc tct                                                         313


<210> 50
<211> 522
<212> DNA
<213> Homo sapien

<400> 50
gaattcggca cgagggacag ccaacaaaag cagcttcttg aagttcaact tcagcaaaat       60
aaggagctgg aaaataaata tgctaaatta gaagaaaagc tgaaggaatc tgaggaagca      120
aatgaggatc tgcggaggtc ctttaatgcc ctacaagaag agaaacaaga tttatctaaa      180
gagattgaga gtttgaaagt atctatatcc cagctaacaa gacaagtaac agccttgcaa      240
gaagaaggta ctttaggact ctatcatgcc cagttaaaag taaaagaaga agaggtacac      300
aggttaagtg ctttgttttc ctcctctcaa aagagaattg cagaactgga agaagaattg      360
gtttgtgttc aaaaggaagc tgccaagaag gtaggtgaaa ttgaagataa actgaagaaa      420
```

```
gaattaaagc atcttcatca tgatgcaggg ataatgagaa atgaaactga aacagcagaa    480
gagagagtgg cagagctagc aagagatttg gtggagatgg aa                        522
```

<210> 51
<211> 463
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(463)
<223> n = A,T,C or G

<400> 51
```
gaattcggca cgaggagcac ttcggctcct cgcgcgctcg cgtccctcg tgcgggctcc      60
agccgcagcc ttagcttcgg ctcccggctt gggtggcgcg gccgtgccct cgtttggcc     120
tccgaacgcg gctcgaatgg caagccaaaa ttccttccgg atagaatatg ataccttgg     180
tgaactaaag gtgccaaatg ataagtatta tggcgccag accgtgagat ctacgatgaa     240
ctttaagatt ggaggtgtga cagaacgcat gccaacccca gttattaaag cttttggcat    300
cttgaagcga gcggccgctg aagtaaacca ggattatggt cttgatccaa agattgctan    360
tgcaataatg aaggcagcag angaggtagc tgaaggtaaa ttaaatgatc attttcctct    420
cgtggtatgg cagactggat caggaactca gacaaatatg aat                       463
```

<210> 52
<211> 423
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(423)
<223> n = A,T,C or G

<400> 52
```
gaattcggca cgagaaagcg cagccgagcc cagcgccccg cacttttctg agcagacgtc     60
cagagcagag tcagccagca tgaccgagcg ccgcgtcccc ttctcgctcc tgcggggccc    120
cagctgggac cccttccgcg actggtaccc gcatagccgc ctcttcgacc aggccttcgg    180
gctgccccgg ctgccggagg agtggtcgca gtggttaggc ggcagcagct ggccaggcta    240
cgtgcgcccc ctgcccccg ccgccatcga gagccccgca gtggccgcgc cgcctacag     300
ccgcgcgctc agccggcaac tcagcagcgg ggtctcggag atccggcaca ctgcggaccg    360
ctggcgcgtg tccctggatg tcaaccactt cgccccggac gagctgacgg tcaagaccaa    420
nga                                                                   423
```

<210> 53
<211> 474
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(474)
<223> n = A,T,C or G

<400> 53

```
gaattcggca cgagggaatc tctacattgc tggcttttcc ttgctgctgt ccttcctgct      60
tagacgcctg gtgactctca tttcgcagca ggccacgctg ctggcctcca atgaagcctt     120
taaaaagcag gcggagagtg ctagtgaggc ggccaagang tacatggagg agaatgacca     180
gctcaagaan ggagctgctg ttgacggagg caagttggat gtcgggaatg ctgaggtgaa     240
gttggaggaa gagaacagga gcctgaaggc tgacctgcag aagctaaagg acgagctggc     300
cagcactaag caaaaactag agaaagctga aaaccaggtt ctggccatgc ggaagcagtc     360
tgagggcctc accaaggagt acgaccgctt gctggaggag cacgcaaagc tgcaggctgc     420
agtagatggt cccatggaca agaaggaaga gtaagggcct tccttcctcc cctg           474
```

```
<210> 54
<211> 473
<212> DNA
<213> Homo sapien
```

```
<400> 54
gaattcggca cgagctcgtg ccgaatcggc acgagggatc ggtcgcctga gaggtatcac      60
ctcttctggg ctcaagatgg acaacaagaa gcgcctggcc tacgccatca tccagttcct     120
gcatgaccag ctccggcacg ggggcctctc gtccgatgct caggagagct tggaagtcgc     180
catccagtgc ctggagactg cgtttggggt gacggtagaa gacagtgacc ttgcgctccc     240
tcagactctg ccggagatat ttgaagcggc tgccacgggc aaggagatgc cgcaggacct     300
gaggagccca gcgcgaaccc cgccttccga ggaggactca gcagaggcag agcgcctcaa     360
aaccgaagga aacgagcaga tgaaagtgga aaactttgaa gctgccgtgc atttctacgg     420
aaaagccatc gagctcaacc cagccaacgc cgtctatttc tgcaacagaa gcc            473
```

```
<210> 55
<211> 365
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(365)
<223> n = A,T,C or G
```

```
<400> 55
gaattcggca cgagtgattg aggatcagtt gggtgccaga cactctctta ggtgtcagag      60
ctccagttta cattacacag ataaggtccc tgcccccag cgaagctggc attaaagtca     120
gcaaataaat gttcaggatt ttgataagtg ctgtaaagga aaaaagacct gtaacagggt     180
ggaatgactg gggaggggc gaggctctat ctaggcaggg atggaccaga cntgagagtg     240
accaggaggt tcgagccagt tgcagaggga caagaaaggc cttctgggca ggggcactta     300
caggtacaga gccctgcag cagaataagc ttctcctacc ggagaggcaa aaagaaggcc     360
ttttg                                                                  365
```

```
<210> 56
<211> 517
<212> DNA
<213> Homo sapien
```

```
<400> 56
gaattcggca cgaggacgc cgctttgttg cctgagatga agttggagcc cttgttttg       60
acattggatc ctatactgtg agagctggtt atgctggtga ggactgcccc aaggtggatt     120
ttcctacagc tattggtatg gtggtagaaa gagatgacgg aagcacatta atggaaatag     180
atggcgataa aggcaaacaa ggcggtccca cctactacat agatactaat gctctgcgtg     240
ttccgaggga gaatatggag gccatttcac tctaaaaaaa tgggatggtt gaagactggg     300
```

```
atagtttcca agctattttg gatcatacct acaaaatgca tgtcaaatca gaagccagtc      360
tccatcctgt tctcatgtca gaggcaccgt ggaatactag agcaaagaga gagaaactga      420
cagagttaat gtttgaacac tacaacatcc ctgccttctt cctttgcaaa actgcagttt      480
tgacagcatt tgctaatggt ccgttctact gggcttg                              517


<210> 57
<211> 237
<212> DNA
<213> Homo sapien


<400> 57
gaattcggca cgagctatga gatagtatta agcaattaaa agaatatatg acttttctac       60
atcaaaattt gaaacttctg tgcatcaaag gacacaatca acagagtgaa gaggaaactt      120
acagaatggg agaaaatatt tgtaaatcat gtatctcata aggattaata tccaggctat      180
gtaaagaact acatctcaac acaaaaacac aaacagcttg attaaaaaat gggcaaa        237


<210> 58
<211> 485
<212> DNA
<213> Homo sapien


<400> 58
gaattcggca cgagcgcggc ggtcactgcg ccggggtagt gggccccagt gttgcgctct       60
ctggccgttc cttacacttt gcttcaggct ccagtgcagg ggcgtagtgg gatatggcca      120
actcgggctg caaggacgtc acgggtccag atgaggagag ttttctgtac tttgcctacg      180
gcagcaacct gctgacagag aggatccacc tccgaaaccc ctcggcggcg ttcttctgtg      240
tggcccgcct gcaggatttt aagcttgact ttggcaattc ccaaggcaaa acaagtcaaa      300
cttggcatgg agggatagcc accatttttc agagtcctgg cgatgaagtg tggggagtag      360
tatggaaaat gaacaaaagc aatttaaatt ctctggatga gcaagaaggg gttaaaagtg      420
gaaatgtatg ttgtaataga agttaaaagt tgccaacttc aagaaaggaa aaaaaaaata      480
acctg                                                                485


<210> 59
<211> 514
<212> DNA
<213> Homo sapien


<400> 59
gaattcggca cgagtggcgt tggaggtcgg cgatatggaa gatgggcagc tttccgactc       60
ggattccgac atgacggtcg cacccagcga caggccgctg caattgccaa aagtgctagg      120
tggcgacagt gctatgaggg ccttccagaa cacggcaact gcatgtgcac cagtatcaca      180
ttatcgagct gttgaaagtg tggattcaag tgaagaaagt ttttctgatt cagatgatga      240
tagctgtctt tggaaacgca aacgacagaa atgttttaac cctcctccca aaccagagcc      300
ttttcagttt ggccagagca gtcagaaacc acctgttgct ggaggaaaga agattaacaa      360
catatggggt gctgtgctgc aggaacagaa tcaagatgca gtggccactg aacttggtat      420
cttgggaatg gagggcacta ttgacagaag cagacaatcc gagacctaca attatttgct      480
tgccaagaaa cttaggaagg aatctcaaga gcat                                 514


<210> 60
<211> 336
<212> DNA
<213> Homo sapien


<220>
```

<221> misc_feature
<222> (1)...(336)
<223> n = A,T,C or G

<400> 60
gaattcggca cgaggccgcc gggtgctggt caccggggca ggcaaaggta tagggcgcgg   60
cacggtccag gcgctgcacg cgacgggcgc gcgggtggtg gctgtgagcc ggactcaggc   120
ggatcttgac agccttgtcc gcgagtgccc ggggatagaa cccgtgtgcg tggacctggg   180
tgactgggag gccaccgagc gggcgctggg cagcgtgggc cccgtggacc tgctggtgaa   240
caacgccgct gtcgccctgc tgcagccctt nctggaggtc accaaggagg cctttgacag   300
atcctttgag gtgaacctgc gtgcggtcat ccaggt   336

<210> 61
<211> 515
<212> DNA
<213> Homo sapien

<400> 61
gaattcggca cgaggtcgcc tgagaggtat cacctcttct gggctcaaga tggacaacaa   60
gaagcgcctg gcctacgcca tcatccagtt cctgcatgac cagctccggc acggggagcct   120
ctcgtccgat gctcaggaga gcttggaagt cgccatccag tgcctggaga ctgcgtttgg   180
ggtgacggta gaagacagtg accttgcgct ccctcagact ctgccggaga tatttgaagc   240
ggctgccacg ggcaaggaga tgccgcagga cctgaggagc ccagcgcgaa ccccgccttc   300
cgaggaggac tcagcagagg cagagcgcct caaaaccgaa ggaaacgagc agatgaaagt   360
ggaaaacttt gaagctgccg tgcatttcta cggaaaagcc atcgagctca acccagccaa   420
cgccgtctat ttctgcaaca gagccgcagc ctacagcaaa ctcggcaact acgcaggcgc   480
ggtgcaggac tgtgagcggg ccatctgcat tgacc   515

<210> 62
<211> 417
<212> DNA
<213> Homo sapien

<400> 62
gaattcggca cgagagccaa cctcctggaa gggcacgcgc gtgctgaggt gtacccttca   60
gccaagccaa tgatcaaatt ccaatcaccc tatgaggaac agttggaaca gcagagactg   120
gcagtgcagc aggtggagga ggcccagcag ctgcgggaac accaggaagc tttgcaccag   180
cagaggctgc aggggcactt actacggcag caggaacagc agcagcagca ggtggcaaga   240
gagatggccc tgcagaggca ggctgagctt gaggagggcc ggccgcagca ccaggagcag   300
ctccggcagc aagctcatta tgatgctatg gataatgata tcgttcaggg agcagaggac   360
cagggaatcc aaggagagga aggagcctat gaaagagaca accagcacca agatgaa   417

<210> 63
<211> 455
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(455)
<223> n = A,T,C or G

<400> 63
gaattcggca cgagggccgg gcttgggctg cgtggagaat acttttttgcg atgcctactg   60

```
gagactttga ttcgaagccc agttgggccg accaggtgga ggaggagggg gaggacgaca      120
aatgtgtcac cagcgagctc ctcaagggga tccctctggc cacaggtgac accagcccag      180
agccaganct actgccggga gctccactgc cgcctcccaa ggaggtcatc aacggaaaca      240
taaagacagt gacagagtac aagatagatg aggatggcaa gaagttcaag attgtccgca      300
ccttcaggat tgagacccgg aaggcttcaa aggctgtcgc aaggaggaag aactggaaga      360
agttcgggaa ctcagagttt gacccccccg gacccaatgt ggccaccacc actgtcagtg      420
acgatgtctc tatgacgttc atcaccagca aagag                                455
```

<210> 64
<211> 517
<212> DNA
<213> Homo sapien

<400> 64
```
gaattcggca cgagccatgt tggggtttgt gggtcgggtg gccgctgctc cggcctccgg       60
ggccttgcgg agactcaccc cttcagcgtc gctgccccca gctcagctct tactgcgggc      120
cgctccgacg gcggtccatc ctgtcaggga ctatgcggcg caaacatctc cttcgccaaa      180
agcaggcgcc gccaccgggc gcatcgtggc ggtcattggc gcagtggtgg acgtccagtt      240
tgatgaggga ctaccaccaa ttctaaatgc cctggaagtg caaggcaggg agaccagact      300
ggttttggag gtggcccagc atttgggtga gagcacagta aggactattg ctatggatgg      360
tacagaaggc ttggttagag gccagaaagt actggattct ggtgcaccaa tcaaaattcc      420
tgttggtcct gagactttgg gcagaatcat gaatgtcatt ggagaaccta ttgatgaaag      480
aggtcccatc aaaaccaaac aatttgctcc cattcat                              517
```

<210> 65
<211> 519
<212> DNA
<213> Homo sapien

<400> 65
```
gaattcggca cgagtggagg tcggcgatat ggaagatggg cagctttccg actcggattc       60
cgacatgacg gtcgcaccca gcgacaggcc gctgcaattg ccaaaagtgc taggtggcga      120
cagtgctatg agggccttcc agaacacggc aactgcatgt gcaccagtat cacattatcg      180
agctgttgaa agtgtggatt caagtgaaga aagttttct gattcagatg atgatagctg       240
tctttggaaa cgcaaacgac agaaatgttt taaccctcct cccaaaccag agccttttca      300
gtttggccag agcagtcaga aaccacctgt tgctggagga aagaagatta caacatatg       360
gggtgctgtg ctgcaggaac agaatcaaga tgcagtggcc actgaacttg gtatcttggg      420
aatggagggc actattgaca gaagcagaca atccgagacc tacaattatt tgcttgccaa      480
gaaacttagg aaggaatctc aagagcattc caaaagatc                            519
```

<210> 66
<211> 517
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(517)
<223> n = A,T,C or G

<400> 66
```
gaattcggca cgagggcggc tgaggaaagc aggaggaggt ggcggcggcg ggaagatggc       60
tccttcacct accaaacgca aagaccgctc agatgagaag tccaaggatc gctcaaaaga      120
taaaggggcc accaaggagt cgagtgagaa ggatcgcggc cgggacaaaa cccgaaagag      180
```

```
gcgcagcgct tccagtggta gcagcagtac caggtctcgg tccagctcga cttccagctc      240
aggctccagc accagcactg gctcaagcag tggctccagc tcttcctcag catccagccg      300
ctcaggaagc tccagcacct cccgcagctc cagctctagc agctcttctg gctctccaag      360
tccttctcgg cgcanacacg acaacaggag gcgctcccgc tccaaatcca aaccacctaa      420
aagagatgaa aaggagagga aaaggcggag cccatctcct aagcccacca aagtgcacat      480
tgggagactc acccggaatg tgacaaagga tcacatc                              517
```

<210> 67
<211> 517
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(517)
<223> n = A,T,C or G

<400> 67

```
gaattcggca cgaggcgccg tgcagcggct gagtgtnngc ggcggcgacg gcaaacccgg       60
agctgccggc cggcgcgcgg gaggaggacg cgggtgcggt ctaggaaacg gagctgcggg      120
cggaggctcc atgttgggaa gcggcgccgt tcgtgcttgt tagcgggaat ccgggagccg      180
cggggtgagc tggcgggggc cgggccctaa gtgaagatgg aggccccgct gcggcctgcc      240
gcggacatcc tgaggcggaa cccgcagcag gactacgaac tcgtccagag ggtcggcagc      300
ggcacctacg gggacgtcta taaggccaga aatgtacaca caggagagct ggctgcagta      360
aaaatcatta aattggagcc tggagatgat ttttctttga ttcaacaaga aatatttatg      420
gttaaagaat gtaaacattg taacatcgtt gcctactttg ggagttatct tagtcgggaa      480
aaactatgga tttgtatgga atactgtggt ggcggat                              517
```

<210> 68
<211> 516
<212> DNA
<213> Homo sapien

<400> 68

```
gaattcggca cgaggtcggt tcctgctatt ccggtttctc cactccgtcc cccgcgggtc       60
tgctctgtgt gccatggacg gcattgtccc agatatagcc gttggtacaa agcggggatc      120
tgacgagctt ttctctactt gtgtcactaa cggaccgttt atcatgagca gcaactcggc      180
ttctgcagca aacggaaatg acagcaagaa gttcaaaggt gacagccgaa gtgcaggcgt      240
cccctctaga gtgatccaca tccggaagct ccccatcgac gtcacggagg gggaagtcat      300
ctccctgggg ctgccctttg ggaaggtcac caacctcctg atgctgaagg ggaaaaacca      360
ggccttcatc gagatgaaca cggaggaggc tgccaacacc atggtgaact actacacctc      420
ggtgaccccct gtgctgcgcg gccagcccat ctacatccag ttctccaacc acaaggagct      480
gaagaccgac agctctccca accaggcgcg ggccca                                516
```

<210> 69
<211> 455
<212> DNA
<213> Homo sapien

<400> 69

```
gaattcggca cgaggagcca tagagcctct gcctcgatgc cgttttgccc ccgctctttg       60
gacacgccga cccggcgctc cccaaggaat gctgtcccaa caagattccc gtgaaagagc      120
acccgtgtcg cccctcccg tggacttctg tgccgccccg tccacacctg ttcttgggtg      180
catgtgggtt ttcggttcct ggcggtccag gacggggcgg gggctcccct cccatctcgt      240
```

```
gctgggaggt ctcagcgcgc tctcctgtcc ctgggacgtg cgtctctcct tctcatgccg        300
ttctggaaaa tgctcttgct gtagagagca gctgcttctg ccagggtgtt ggaggtggtg        360
gagcgccttc cgattccatt catggcattt tgtgatgtga tgtaattgga atagagctgt        420
tgatttaagg caaaaaaaaa aaaaaaaaac tcgag                                   455


<210> 70
<211> 569
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(569)
<223> n = A,T,C or G


<400> 70
gaattcggca cgagcagaac gcagctctgc tctgctngag gaggtgcaga gcctccggga         60
ggaggctgag aaacagcggg tggcttcaga gaacctgcgg caggagctga cctcacaggc        120
tgagcgtgcg gaggagctgg gccaagaatt gaaggcgtgg caggagaagt tcttccagaa        180
agagcaggcc ctctccaccc tgcagctcga gcacaccagc acacaggccc tggtgagtga        240
gctgctgcca gctaagcacc tctgccagca gctgcaggcc gagcaggccg ctgccgagaa        300
acgccaccgt gaggagctgg agcagagcaa gcaggccgct gggggactgc gggcagagct        360
gctgcgggcc cagcgggagc ttggggagct gattcctctg cggcagaagg tggcagagca        420
ggagcgaaca gctcagcagc tgcgggcaga gaaggccagc tatgcagagc agctgagcat        480
gctgaagaag gcgcatggcc tgctggcaga ggagaaccgg gggctgggtg agcgggccaa        540
ccttggccgg cagtttctgg aagtggagt                                         569


<210> 71
<211> 555
<212> DNA
<213> Homo sapien


<400> 71
gaattcggca cgagtggcga cgccccctaa gcggcgggcg gtggaggcca cggggggagaa        60
agtgctgcgc tacgagacct tcatcagtga cgtgctgcag cgggacttgc gaaaggtgct        120
ggaccatcga gacaaggtat atgagcagct ggccaaatac cttcaactga gaaatgtcat        180
tgagcgactc caggaagcta agcactcgga gttatatatg caggtggatt tgggctgtaa        240
cttcttcgtt gacacagtgg tcccagatac ttcacgcatc tatgtggccc tgggatatgg        300
ttttttcctg gagttgacac tggcagaagc tctcaagttc attgatcgta agagctctct        360
cctcacagag ctcagcaaca gcctcaccaa ggactccatg aatatcaaag cccatatcca        420
catgttgcta gaggggctta gagaactaca aggcctgcag aatttcccag agaagcctca        480
ccattgactt cttcccccca tcctcagaca ttaaagagcc tgaatgccaa aaaaaaaaaa        540
aaaaaaaaac tcgag                                                         555


<210> 72
<211> 567
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(567)
<223> n = A,T,C or G
```

```
<400> 72
gaattcggca cgagggctgg tggagttgtt agtgtnctat ggcaacacct tctttgtggt      60
tctcattgtc atccttgtgc tgttggtcat cgatgccgtg cgcgaaattc ggaagtatga     120
tgatgtgacg gaaaaggtga acctccagaa caatcccggg gccatggagc acttccacat     180
gaagcttttc cgtgcccaga ggaatctcta cattgctggc ttttccttgc tgctgtcctt     240
cctgcttaga cgcctggtga ctctcatttc gcagcaggcc acgctgctgg cctccaatga     300
agcctttaaa aagcaggcgg agagtgctag tgaggcggcc aagaagtaca tggaggagaa     360
tgaccagctc aagaagggag ctgctgttga cggaggcaag ttggatgtcg ggaatgctga     420
ggtgaagttg gaggaagaga acaggagcct gaaggctgac ctgcagaagc taaaggacga     480
gctggccagc actaagcaaa aactagagaa agctgaaaac caggttctgg ccatgcggaa     540
gcagtctgag ggcctcacca aggagta                                         567


<210> 73
<211> 254
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(254)
<223> n = A,T,C or G

<400> 73
gaattcggca cgagcctgga caaggagaga gtgcggntgc tgagagccga gcccagcaat      60
cccgatcctc tgagtcgtga agaagggagg cagcgagggg gttgggggttg gggcctgagg    120
caagccccca ggctccgctc ttgccagagg dacaggagcc atggctcaga aaatggactg     180
tggtgcgggc ctcctcggct tccaggctga ggcctccgta gaagacagcg ccttgcttat     240
gcagaccttg atgg                                                        254


<210> 74
<211> 516
<212> DNA
<213> Homo sapien

<400> 74
gaattcggca cgagcagccc tcggctgagc cgcgccgcac catgcccgcc gtggacaagc      60
tcctgctaga ggaggcgttg caggacagcc cccagactcg ctctttactg agcgtgtttg     120
aagaagatgc tggcaccctc acagactata ccaaccagct gctccaggca atgcagcgcg     180
tctatggagc ccagaatgag atgtgcctgg ccacacaaca gctttctaag caactgctgg     240
catatgaaaa acagaacttt gctcttggca aaggtgatga agaagtaatt tcaacactcc     300
actatttttc caaagtggtg gatgagctta atcttctcca tacagagctg gctaaacagt     360
tggcagacac aatggttcta cctatcatac aattccgaga aaaggatctc acagaagtaa     420
gcactttaaa ggatctattt ggactcgcta gcaatgagca tgacctctca atggcaaaat     480
acagcaggct gcctaagaaa aaggagaatg agaagg                               516


<210> 75
<211> 468
<212> DNA
<213> Homo sapien

<400> 75
gaattcggca cgagcaggga cgacgcccag aatgggagct gactgatatg gtggtgtggg      60
tgactggagc ctcgagtgga attggtgagg agctggctta ccagttgtct aaactaggag     120
tttctcttgt gctgtcagcc agaagagtgc atgagctgga aagggtgaaa agaagatgcc     180
```

```
tagagaatgg caatttaaaa gaaaaagata tacttgtttt gccccttgac ctgaccgaca      240
ctggttccca tgaagcggct accaaagctg ttctccagga gtttggtaga atcgacattc      300
tggtcaacaa tggtggaatg tcccagcgtt ctctgtgcat ggataccagc ttggatgtct      360
acagaaagct aatagagctt aactacttag ggacggtgtc cttgacaaaa tgtgttctgc      420
ctcacatgat cgagaggaag caaggaaaga ttgttacttg tgaatagc                   468
```

<210> 76
<211> 349
<212> DNA
<213> Homo sapien

<400> 76
```
gaattcggca cgagctcgac tcttagcttg tcggggacgg taaccgggac ccggtgtctg       60
ctcctgtcgc cttcgcctcc taatccctag ccactatgcg tgagtgcatc tccatccacg      120
ttggccaggc tggtgtccag attggcaatg cctgctggga gctctactgc ctggaacacg      180
gcatccagcc cgatggccag atgccaagtg acaagaccat tggggggagga gatgactcct      240
tcaacacctt cttcagtgag acgggcgctg gcaagcacgt gccccgggct gtgtttgtag      300
acttggaacc cacagtcatt gatgaagttc gcactggcac ctaccgcca                  349
```

<210> 77
<211> 469
<212> DNA
<213> Homo sapien

<400> 77
```
ataggcacat acacatacac agtctcagca aggttataaa gaaccctgtc aggtccactt       60
gcaacatggc cttgctactt ggattagctc ctttaagcct gaaaataact ttcctggtca      120
tggaagaact ggacgcatct tttaacttat gaaatagaag ttgaacttga aaactctttt      180
taaaaaatcc tggttttgca ggacagctac ataatgaatg tatatattaa gactgtagct      240
gaattgcaca tgaaatcaga ttgccaactt cttgactttc aatgttagac atttatcctt      300
aagttgtgag cgatatatgt agcatgctgt gaaatgtctg ttatagctct ttaattcatc      360
agtattaata cagaattatc atttgcgttt cttggtactt tttattcaat gtaatcagaa      420
gctgtgatgt tttgcctttg tagtcctgtg ctttggtact gtaattttt                  469
```

<210> 78
<211> 399
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(399)
<223> n = A,T,C or G

<400> 78
```
gcgctcggtt tgagggctcg gcgcggggtt tcctgttcct tcttctgcgc ggctgcagct       60
cgggacttcg gcctgaccca gcccccatgg cttcagaaga gctacagaaa gatctagaag      120
aggtaaaggt gttgctggaa aaggctacta ggaaaagagt acgtgatgcc cttacagctg      180
aaaaatccaa gattgagaca gaaatcaaga acaagatgca acagaaatca cagaagaaag      240
canaacttct tgataatgaa aaaccagctg ctgtggttgc tcccattaca acgggctata      300
cggtgaaaat cagtaattat ggatgggatc aagtcagata agtttgtgaa aatctacatt      360
accttaactg gagttcatca agttcccact gagaatgtg                            399
```

<210> 79

```
<211> 439
<212> DNA
<213> Homo sapien

<400> 79
ccgagaagct gggctttgct ggtcttgtac aggagatctc atttgggaca actaaggata      60
aaatgctggt catcgagcag tgtaagaact ccagagctgt aaccattttt attagaggag     120
gaaataagat gatcattgag gaggcgaaac gatcccttca cgatgctttg tgtgtcatcc     180
ggaacctcat ccgcgataat cgtgtggtgt atggaggagg ggctgctgag atatcctgtg     240
ccctggcagt tagccaagag gcggataagt gccccacctt agaacagtat gccatgagag     300
cgtttgccga cgcactggag gtcatcccca tggccctctc tgaaaacagt ggcatgaatc     360
ccatccagac tatgaccgaa gtccgagcca gacaggtgaa ggagatgaac cctgctcttg     420
gcatcgactg tttgcacaa                                                  439


<210> 80
<211> 437
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(437)
<223> n = A,T,C or G

<400> 80
aattaacatc ttttttgttt aggcatgttc aattaatgct gtagctatca tagctntgct      60
cttacctgaa gccttgtccc caccacacag gacagccttc ctcctgaaga gaatgtcttt     120
gtgtgtccga agttgagatg gcctgcccta ctgccaaaga ggtgacagga aggctgggag     180
cagctttgtt aaattgtgtt cagttctgtt acacagtgca ttgccctttg ttggggggtat    240
gcatgtatga acacacatgc ttgtcggaac gctttctcgg cgtttgtccc ttggctctca     300
tctcccccat tcctgtgcct actttgcctg agttcttcta cccccgcagt tgccagccac     360
attgggagtc tgtttgttcc agtggggttg agctgtcttt gtcgtggaga tcttggaact     420
ttgcacatgt cactact                                                   437


<210> 81
<211> 472
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(472)
<223> n = A,T,C or G

<400> 81
atattttant aatgcagagc tatagtctca attgttactt tataaggtgg ttttattaac      60
aaacccaaat cctggatttt cctgtctttg ctgtattttg aaaaacacgt gttgactcca     120
ttgttttaca tgtagcaaag tctgccatct gtgtctgctg tattataaac agataagcag     180
cctacaagat aactgtattt ataaccact cttcaacagc tggctccagt gctggtttta      240
gaacaagaat gaagtcattt tggagtcttt catgtctaaa agatttaagt taaaaacaaa     300
gtgttacttg gaaggttagc ttctatcatt ctggatagat tacagatata ataaccatgt     360
tgactatggg ggagagacgc tgcattccag aaacgtctta cacttgagt gaatcttcaa      420
aggaccctga cattaaatgc tgaggcttta atacacacat attttatccc aa             472
```

<210> 82
<211> 448
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(448)
<223> n = A,T,C or G

<400> 82
gttcagtgnt gccctcagag ctcttgctgt tagctggcag ctgacgctgc taggatagtt   60
agtttggaaa tggtacttca taataaacta cacaaggaaa gtcagccacc gtgtcttatg   120
aggaattgga cctaataaat tttagtgtgc cttccaaacc tgagaatata tgcttttgga   180
agttaaaatt taaatggctt ttgccacata catagatctt catgatgtgt gagtgtaatt   240
ccatgtggat atcagttacc aaacattaca aaaaaatttt atggcccaaa atgaccaacg   300
aaattgttac aatagaattt atccaatttt gatctttta tattcttcta ccacacctgg   360
aaacagacca atagacattt tggggtttta taatgggcat ttgtataaag cattactctt   420
tttcaataaa ttgttttta atttaaaa   448

<210> 83
<211> 270
<212> DNA
<213> Homo sapien

<400> 83
cagtgtggtg gaattaatca ggcctcccaa atttagcagg tgctggggag gaccctaggg   60
agtggtttat gggggctagc tggtgaaact gccctttcct ttctgttcta tgagtgtgat   120
ggtgtttgag aaaatgtggg gctatggttc aggcgcactt cacatgtgca aagatggaga   180
aagcactcac ctacacgttt aggctcagaa tattgattga aacattttga atgatcaaaa   240
ataaaatgtt atttttaaag tttcaaaaaa   270

<210> 84
<211> 359
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(359)
<223> n = A,T,C or G

<400> 84
tccaaagtta gacaaaatgc caggaatgtt cttctctgct aacccaaagg aattgaaagg   60
aaccactcat tcacttctag acgacaaaat gcaaaaaagg aggccaaaga cttttggaat   120
ggatatgaaa gcatacctga gatctatgat cccacatctg gaatctggaa tgaaatcttc   180
caagtccaag gatgtacttt ctgctgctga agtaatgcaa tggtctcaat ctctggaaaa   240
acttcttgcc aaccaaactg gtcaaaatgt cttttggaagt ttcctaaant ctgaattcag   300
tgaggagaat attgagttct ggctggcttg tgaanactat aagaaaacag agtctgatc   359

<210> 85
<211> 371
<212> DNA
<213> Homo sapien

```
<220>
<221> misc_feature
<222> (1)...(371)
<223> n = A,T,C or G

<400> 85
ctgcagcccg ggggatccac tagtccnttg tggtggaatt cagcctacag ccgcctgggt      60
ctgtatccag cgccaggtcc cgccagtccc agctgcgcgc gcccccagt cccgcacccg      120
ttcggcccag gctaagttag ccctcaccat gccggtcaaa ggaggcacca agtgcatcaa      180
atacctgctg ttcggattta acttcatctt ctggcttgcc gggattgctg tccttgccat      240
tggactatgg ctccgattcg actctcagac caagagcatc ttcgagcaag aaactaataa      300
taataattcc agcttctaca caggagtcta tattctgata cggagccggc gccctcatga      360
tgcttggtgg g                                                          371


<210> 86
<211> 500
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(500)
<223> n = A,T,C or G

<400> 86
ctgcagcccg ggggatccac tagtttncta tgatcattaa actcattctc agggttaaga      60
aaggaatgta aatttctgcc tcaatttgta cttcatcaat aagttttttga agagtgcaga      120
tttttagtca ggtcttaaaa ataaactcac aaatctggat gcatttctaa attctgcaaa      180
tgtttcctgg ggtgacttaa caaggaataa tcccacaata tacctagcta cctaatacat      240
ggagctgggg ctcaacccac tgttttttaag gatttgcgct aacttggggc tgaggaaaaa      300
taagtagtnc gaggaagtag tttttaaatg tgagcttata gatanaaaca gaatatcaac      360
ttaattatga aattgttaga acctgttctc ttgtatctga atctgattgc aattactatt      420
gtactgatag actccagcca ttgcaagtct cagatatctt agctgtgtag tgattcttga      480
aattctttttt aagaaaaatt                                                500


<210> 87
<211> 550
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(550)
<223> n = A,T,C or G

<400> 87
ctgcagcccg ggggatccac tagtccantg tggtggaatt ccaggaactg gaccaggnnc      60
tggagcggat ctccaccatg cgccttccgg atgagcgggg ccctctggag cacctctact      120
ccctgcacat ccccaactgt gacaagcatg gcctgtacaa cctcaaacag tgcaagatgt      180
ctctgaacgg gcagcgtggg gagtgctggt gtgtgaaccc caacaccggg aagctgatcc      240
agggagcccc caccatccgg ggggaccccg agtgtcatct cttctacaat gagcagcagg      300
aggctcgcgg ggtgcacacc cagcggatgc agtagaccgc agccagccgg tgcctggcgc      360
ccctgccccc cgcccctctc caaacaccgg cagaaaacgg agagtgcttg ggtggtgggt      420
```

```
gctggaggat tttccagttc tgacacacgt atttatattt ggaaagagac cagcaccgag    480
ctcggcacct ccccggcctc tctcttccca ngctgcagat gccacacctg ctccttcttg    540
ctttccccgg                                                           550


<210> 88
<211> 429
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(429)
<223> n = A,T,C or G

<400> 88
gggaccagac tcgtctcagg ccanttgcag ccttctcagc caaacgccga ccaaggaaaa     60
ctcactacca tgagaattgc agtgatttgc ttttgcctcc taggcatcac ctgtgccata    120
ccagttaaac aggctgattc tggaagttct gaggaaaagc agctttacaa caaataccca    180
gatgctgtgg ccacatggct aaaccctgac ccatctcaga agcagaatct cctagcccca    240
cagaatgctg tgtcctctga agaaaccaat gactttaaac aagagaccct tccaagtaag    300
tccaacnaaa gccatgacca catggatgat atggatgatg aagatgatga tgaccatgtg    360
gacagccagg actccattga ctcgaacnac tctgatgatg tanatgacac tgatgattct    420
caccagtct                                                            429


<210> 89
<211> 477
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(477)
<223> n = A,T,C or G

<400> 89
ttttaattta caccaagaac ttctcaataa aagaaaatca tgaatgctcc acaatttcaa     60
cataccacaa gagaagttaa tttcttaaca ttgtgttcta tgattatttg taagaccttc    120
accaagttct gatatctttt aaagacatag ttcaaaattg cttttgaaaa tctgtattct    180
tgaaaatatc cttgttgtgt attaggtttt taaataccag ctaaaggatt acctcactga    240
gtcatcaggt accctcctat tcagctcccc aagatgatgt gtttttgctt accctaagag    300
aggntttctt cttatttta gataattcaa gngcttagat aaattatgtt ttctttaagt    360
gtttatggta aactctttta aagaaaattt aatatgttat agctgaatct ttttggtaac    420
tttaaatctt tatcatagac tctgtacata tgttcaaatt agctgcttgc ctgatgt       477


<210> 90
<211> 310
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(310)
<223> n = A,T,C or G
```

```
<400> 90
ctgcagcccg ggggatccac tagtcanttt attgacacta tttgaaactt ttgaaatata        60
aacggagagg ctttctgttg agacattgtc accaaaacaa ttttttgaaa tgttcctgaa       120
actaatttgg gtttaaagat taaaagggtt gttaccattc ttatctgagt agttgggagg       180
aggggaatac cactttagtt catttggaaa atatagacat atttctttg ctttcttaaa        240
acagcttaaa atgatgaact tttataattt taatttgaag attgaataaa tattttttat       300
aaagataaaa                                                              310


<210> 91
<211> 532
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(532)
<223> n = A,T,C or G

<400> 91
ctgcagcccg ggggatccac tagtcatgat gtgtgttgta ttttaaaaat tatctgcaac        60
cttaattcag ctgaagtact ttatatttca aaagaatgaa taacattgat aataaaatcg       120
ctactttaag gggtttgtcc aaaataaata ttgtggcctt atatatcaca ctattgtaga       180
aagtattatt taatttaaat ggatgcaggt tgtctactaa agaaagatta tatataacta       240
tgctaattgt tcataatcaa cagaaaccaa gatagagcta caaactcagc tgtacagttc       300
gtacactaaa ctcttcttgc ttttgcatta taaggaatta agtctccgat tattaggtga       360
tcaccctgga tgatcagttt tctgctgaag gcacctactc agtatctttt cctctttatc       420
actctgcatt ggtgaattta atcctctcct ttgtgttcaa cttttgtgtg ctttttaaaat       480
cagctttatt ctaaagcaaa tctgtgtcta ctttaaaaaa ctgnaaatgg aa               532


<210> 92
<211> 608
<212> DNA
<213> Homo sapien

<400> 92
cactactgtc ttctccttgt agctaatcaa tcaatattct tcccttgcct gtgggcagtg        60
gagagtgctg ctgggtgtac gctgcacctg cccactgagt tggggaaaga ggataatcag       120
tgagcactgt tctgctcaga gctcctgatc taccccaccc cctaggatcc aggactgggt       180
caaagctgca tgaaaccagg ccctggcagc aacctgggaa tggctggagg tgggagagaa       240
cctgacttct ctttccctct ccctcctcca acattactgg aactctatcc tgttaggatc       300
ttctgagctt gtttccctgc tgggtgggac agaggacaaa ggagaaggga gggtctagaa       360
gaggcagccc ttctttgtcc tctggggtaa atgagcttga cctagagtaa atggagagac       420
caaaagcctc tgatttttaa tttccataaa atgttagaag tatatatata catatatata       480
tttctttaaa tttttgagtc tttgatatgt ctaaaaatcc attccctctg ccctgaagcc       540
tgagtgagac acatgaagaa aactgtgttt catttaaaga tgttaattaa atgattgaaa       600
cttgaaaa                                                                608


<210> 93
<211> 519
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
```

<222> (1)...(519)
<223> n = A,T,C or G

<400> 93
ctgcagcccg ggggatccac tagtccagtg tggtggaatt ctaaagaagt aggtgctgca   60
cacaaatatg taaagcaatt gtaggaaatt tgaaaggaaa aaaagaaacc gaagccagta   120
ttttaataat tgctttttct gtgtattttg tattgggctg ggggatagca tcaaaggttg   180
aactttttga gctttctatg aaaaacccca ggaccttctt tctttggcca tttctatgga   240
aatgcgatgt cagatggatg gtaatggtgc cctccagtgg ctgtgagacc tcattgcgca   300
ttgtctactg gagctttagt cttctgagac ggaggaaaac tgctgaatac tctggattca   360
tctatgtcta caatgttgca tttatgaaaa actacactgn gctaggcgca ttctaggaca   420
tgaatatgac cacaccctct ttcaccgggt gtttctgtag caagttttca tattctttt   480
aaacaatggt ttctctgcgt taattattga ggaaaaaaa   519

<210> 94
<211> 569
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(569)
<223> n = A,T,C or G

<400> 94
ctgcagcccg ggggatccac tagtccantg tggtggaatt cgtctgcgag ccaggattcc   60
cgatccagag acaatggccc cgatgggatg gagcccgaag gcgtcatcga gagtaactgg   120
aatgagattg ttgacagctt tgatgacatg aacctctcgg agtcccttct ccgtggcatc   180
tacgcctatg gttttgagaa gccctctgcc atccagcagc gagccattct accttgtatc   240
aagggttatg atgtgattgc tcaagcccaa tctgggactg ggaaaacggc cacatttgcc   300
atatcgattc tgcagcagat tgaattagat ctnaaagcca cccaggcctt ggtcctagca   360
cccactcgag aattggctca gcagatacag aaggtggtcn tggcactagg agactacatg   420
ggcgcctcct gtcacgcctg tatcggggc accaacgtgc gtgctgaggt gcagaaactg   480
cagatggaag ctccccacat catcgtgggt acccctggcc gtgtgtttga tatgcttaac   540
cggagatacc tgtcccccaa atacatcaa   569

<210> 95
<211> 260
<212> DNA
<213> Homo sapien

<400> 95
gacaagctcc tggtcttgag atgtcttctc gttaaggaga tgggcctttt ggaggtaaag   60
gataaaatga atgagttctg tcatgattca ctattctaga acttgcatga cctttactgt   120
gttagctctt tgaatgttct tgaaatttta gactttcttt gtaaacaaat gatatgtcct   180
tatcattgta taaaagctgt tatgtgcaac agtgtggaga ttccttgtct gatttaataa   240
aatacttaaa cactgaaaaa   260

<210> 96
<211> 438
<212> DNA
<213> Homo sapien

<400> 96

```
atttctcttt  agttctttgc  aagaaggtag  agataaagac  actttttcaa  aaatggcaat        60
ggtatcagaa  ttcctcaagc  aggcctggtt  tattgaaaat  gaagagcagg  aatatgttca       120
aactgtgaag  tcatccaaag  gtggtcccgg  atcagcggtg  agcccctatc  ctaccttcaa       180
tccatcctcg  gatgtcgctg  ccttgcataa  ggccataatg  gttaaaggtg  tggatgaagc       240
aaccatcatt  gacattctaa  ctaagcgaaa  caatgcacag  cgtcaacaga  tcaaagcagc       300
atatctccag  gaaacaggaa  agcccctgga  tgaaacactg  aagaaagccc  ttacaggtca       360
ccttgaggag  gttgttttag  ctctgctaaa  aactccggcg  caatttgatg  ctgatgaact       420
tcgttgctgc  catgaagg                                                        438
```

```
<210> 97
<211> 471
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(471)
<223> n = A,T,C or G

<400> 97
tcgttatccg  cgatgngttt  cctggcagct  acattcctgc  tcctggcgct  cagcaccgct        60
gcccaggccg  aaccggtgca  gttcaaggac  tgcgatattc  agtctaaaag  cagcaaggcc       120
gtggtgcatg  gcatcctgat  gggcgtccca  gttccctttc  ccattcctga  gcctgatggt       180
tgtaagagtg  gaattaactg  ccctatccaa  aaagacaaga  cctatagcta  cctgaataaa       240
ctaccagtga  aaagcgaata  tccctctata  aaactggtgg  tggagtggca  acttcaggat       300
gacaaaaacc  aaagtctctt  ctgctgggaa  atcccagtac  agatcgtttc  tcatctctaa       360
gtgcctcatt  gagttcggtg  catctggcca  atgagtctgc  tgagactctt  gacagcacct       420
ccagctctgc  tgcttcaaca  acagtgactt  gctctccaat  ggtatccagt  g                471
```

```
<210> 98
<211> 578
<212> DNA
<213> Homo sapien

<400> 98
ccagtgtggt  ggaattcgca  gccaccgcca  cccattggaa  tggccaacag  gggacctgca        60
tatggcctga  gccgggaggt  gcagcagaag  attgagaaac  aatatgatgc  agatctggag       120
cagatcctga  tccagtggat  caccacccag  tgccgaaagg  atgtgggccg  gccccagcct       180
ggacgcgaga  acttccagaa  ctggctcaag  gatggcacgg  tgctatgtga  gctcattaat       240
gcactgtacc  ccgaggggca  ggccccagta  aagaagatcc  aggcctccac  catggccttc       300
aagcagatgg  agcagatctc  tcagttcctg  caagcagctg  agcgctatgg  cattaacacc       360
actgacatct  tccaaactgt  ggacctctgg  gaaggaaaga  catggcctg   tgtgcagcgg       420
acgctgatga  atctgggtgg  gctggcagta  gcccgagatg  atgggctctt  ctctggggat       480
cccaactggt  tccctaagaa  atccaaggag  aatcctcgga  acttctcgga  taaccagctg       540
caagagggca  agaacgtgat  cgggttacag  atgggcac                                578
```

```
<210> 99
<211> 416
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(416)
```

<223> n = A,T,C or G

<400> 99
```
caagaatgtg cctaactggc atanagatct ggtacgagtg tgtgaaaaca tccccattgt      60
gntgngtggc aacaaagtgg atattaagga caggaaagtg aaggcgaaat ccattgtctt     120
ccaccgaaag aagaatcttc agtactacga catttctgcc aaaagtaact acaactttga     180
aaagcccttc ctctggcttg ctaggaagct cattggagac cctaacttgg aatttgttgc     240
catgcctgct ctcgccccac cagaagttgt catggaccca gctttggcag cacagtatga     300
gcacgactta gaggttgctc anacaactgc tctcccggat gaggatgatg acctgtgaga     360
atgaagctgg agcccancgn cagaagtcta gttttatang cagctgtcct gtgatg        416
```

<210> 100
<211> 441
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(441)
<223> n = A,T,C or G

<400> 100
```
agacaatgac cccacggntc ctccttatga ctccattcaa atctacggtt atgaaggcag      60
gggctcagtg gccgggtccc tgagctccct agagtcggcc accacagatt cagacttgga     120
ctatgattat ctacagaact ggggacctcg ttttaagaaa ctagcagatt tgtatggttc     180
caaagacact tttgatgacg attcttaaca ataacgatac aaatttggcc ttaagaactg     240
tgtctggcgt tctcaagaat ctanaagatg tgtaaacagg tattttttta aatcaaggaa     300
aggctcattt aaaacaggca aagttttaca gagaggatac atttaataaa actgcgagga     360
catcaaagtg gtaaatactg tgaaatacct tttctcacaa aaaggcaaat attgaagttg     420
tttatcaact cgctagaaa a                                                441
```

<210> 101
<211> 521
<212> DNA
<213> Homo sapien

<400> 101
```
ccagcgccca gagagacacc agagaaccca ccatggcccc ctttgagccc ctggcttctg      60
gcatcctgtt gttgctgtgg ctgatagccc ccagcagggc ctgcacctgt gtcccacccc     120
acccacagac ggccttctgc aattccgacc tcgtcatcag ggccaagttc gtggggacac     180
cagaagtcaa ccagaccacc ttataccagc gttatgagat caagatgacc aagatgtata     240
aagggttcca agccttaggg gatgccgctg acatccggtt cgtctacacc cccgccatgg     300
agagtgtctg cggatacttc cacaggtccc acaaccgcag cgaggagttt ctcattgctg     360
gaaaactgca ggatggactc ttgcacatca ctacctgcag tttcgtggct ccctggaaca     420
gcctgagctt agctcagcgc cggggcttca ccaagaccta cactgttggc tgtgaggaat     480
gcacagtgtt tccctgttta tccatcccct gcaaactgca g                        521
```

<210> 102
<211> 520
<212> DNA
<213> Homo sapien

<400> 102
```
gaagaaaaag aaattctgat acgggacaaa aatgctcttc aaaacatcat tctttatcac      60
```

```
ctgacaccag gagtttttcat tggaaaagga tttgaacctg gtgttactaa cattttaaag    120
accacacaag gaagcaaaat ctttctgaaa gaagtaaatg atacacttct ggtgaatgaa    180
ttgaaatcaa aagaatctga catcatgaca acaaatggtg taattcatgt tgtagataaa    240
ctcctctatc cagcagacac acctgttgga aatgatcaac tgctggaaat acttaataaa    300
ttaatcaaat acatccaaat taagtttgtt cgtggtagca ccttcaaaga aatccccgtg    360
actgtctata gacccacact aacaaaagtc aaaattgaag gtgaacctga attcagactg    420
attaaagaag gtgaaacaat aactgaagtg atccatggag agccaattat taaaaaatac    480
accaaaatca ttgatggagt gcctgtggaa ataactgaaa                          520
```

<210> 103
<211> 479
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(479)
<223> n = A,T,C or G

<400> 103
```
ctgattctca ggctagaagt gtcactttttc ttatctgtac ttccaaagca ctttcgtata    60
tttttattat ggcatttata tatagttcat ttatatttaa attttaattc catgaacaat    120
caagtaccaa gtataatgga gaaggtgctc atcctctgcc ttccttgagc ttctgggtga    180
tgccaggccc aagtctttgt ggcacccagc tccatgcttt gaatactatg tggctgaatg    240
aattttttaaa atctcaaagc agttaaacag caggaaagcc cattaacttc gtactgaaaa    300
agcaacatac tgtgatgata cgggatgaca tcatttcagg ttgggcatac aaaaaagtaa    360
ggaagctaaa ctaagactat actcaccagg ccatttagaa gttttaaata atgcctccac    420
tatttttttt cttanacata gctttttaatg gggaaatgga attagtaaat gactattttt   479
```

<210> 104
<211> 324
<212> DNA
<213> Homo sapien

<400> 104
```
tgaccatcca tatccaatgt tctcatttaa acattaccca gcatcattgt ttataatcag    60
aaactctggt ccttctgtct ggtggcactt agagtctttt gtgccataat gcagcagtat    120
ggagggagga ttttatggag aaatggggat agtcttcatg accacaaata aataaaggaa    180
aactaagctg cattgtgggt tttgaaaagg ttattatact tcttaacaat tctttttttc    240
agggactttt ctagctgtat gactgttact tgaccttctt tgaaaagcat tcccaaaatg    300
ctctatttta gatagattaa catt                                           324
```

<210> 105
<211> 541
<212> DNA
<213> Homo sapien

<400> 105
```
cttggttcca gaacctgacg acccggcgac ggcgacgtct cttttgacta aaagacagtg    60
tccagtgctc cagcctagga gtctacgggg accgcctccc gcgccgccac catgcccaac    120
ttctctggca actggaaaat catccgatcg gaaaacttcg aggaattgct caaagtgctg    180
gggggtgaatg tgatgctgag gaagattgct gtggctgcag cgtccaagcc agcagtggag    240
atcaaacagg agggagacac tttctacatc aaaacctcca ccaccgtgcg caccacagag    300
attaacttca aggttgggga ggagtttgag gagcagactg tggatgggag gccctgtaag    360
```

```
agcctggtga aatgggagag tgagaataaa atggtctgtg agcagaagct cctgaaggga      420
gagggcccca agacctcgtg gaccagagaa ctgaccaacg atggggaact gatcctgacc      480
atgacggcgg atgacgttgt gtgcaccagg gtctacgtcc gagagtgagt ggccacaggt      540
a                                                                      541


<210> 106
<211> 391
<212> DNA
<213> Homo sapien

<400> 106
cagaagtctt ggactgcaac tacatacatg gaatatgaga ctcttaccct gggagatatg       60
attaggagaa gtggtggcca cagtcgaaaa atcccaaggc ccaaacctgc accactgact      120
gctgaaatac agcaaaagat tttgcatttg ccaacatctt gggactggag aaatgttcat      180
ggtatcaatt ttgtcagtcc tgttcgaaac caagcatcct gtggcagctg ctactcattt      240
gcttctatgg gtatgctaga agcgagaatc cgtatactaa ccaacaattc tcagacccca      300
atcctaagcc ctcaggaggt tgtgtcttgt agccagtatg ctcaaggctg tgaaggcggc      360
ttcccatacc ttattgcagg aaagtacgcc c                                     391


<210> 107
<211> 462
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(462)
<223> n = A,T,C or G

<400> 107
cgtgacctca agatgngcca ctctgactgg aagagtggag agtactggat tgaccccaac       60
caaggctgca acctggatgc catcaaagtc ttctgcaaca tggagactgg tgagacctgc      120
gtgtacccca ctcagcccag tgtggcccag aagaactggt acatcagcaa gaaccccaag      180
gacaagaggc atgtctggtt cggcgagagc atgaccgatg gattccagtt cgagtatggc      240
ggccagggct ccgaccctgc cgatgtggcc atccagctga ccttcctgcg cctgatgtcc      300
accgaggcct cccagaacat cacctaccac tgcaagaaca gcgtggccta catggaccag      360
cagactgggn acctcaataa ggccctgctc ctccagggct ccaacganat ngagatccgc      420
gccgagggca acagccgctt cacctacagc gtcactgtcg at                         462


<210> 108
<211> 580
<212> DNA
<213> Homo sapien

<400> 108
ataaccatt taatacattt acactttctt atttaagaag atattgaatg caaaataatt        60
gacatataga actttacaaa catatgtcca aggactctaa attgagactc ttccacatgt      120
acaatctcat catcctgaag cctataatga agaaaaagat ctagaaactg agttgtggag      180
ctgactctaa tcaaatgtga tgattggaat tagaccattt ggcctttgaa ctttcatagg      240
aaaaatgacc caacatttct tagcatgagc tacctcatct ctagaagctg ggatggactt      300
actattcttg tttatatttt agatactgaa aggtgctatg cttctgttat tattccaaga      360
ctggagatag gcagggctaa aaaggtatta ttattttttcc tttaatgatg gtgctaaaat      420
tcttcctata aaattcctta aaaataaaga tggtttaatc actaccattg tgaaaacata      480
actgttagac ttcccgtttc tgaaagaaag agcatcgttc caatgcttgt tcactgttcc      540
```

tctgtcatac tgtatctgga atgctttgta atacttgcat   580

<210> 109
<211> 482
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(482)
<223> n = A,T,C or G

<400> 109
caggcgtgca gtttcccggc tctccgcgcg gccggggaag gtcagcgccg taatggcgtt   60
cttggcgtcg ggaccctacc tgacccatca gcaaaaggtg ttgcggcttt ataagcgggc   120
gctacgccac ctcgagtcgt ggtgcgtcca gagagacaaa taccgatact ttgcttgttt   180
gatgagagcc cggtttgaag aacataagaa tgaaaaggat atggcgaagg ccacccagct   240
gctgaaggag gccgaggaag aattctggta ccgtcagcat ccacagccat acatcttccc   300
tgactctcct gggggcacct cctatgagag atacnattgc tacaaggtcc cagaatggtg   360
cttagatgac tggcatcctt ctgagaaggc aatgtatcct gattactttg ccaagagaga   420
acagtggaag aaactgcgga gggaaagctg ggaacgagag gttaagcagc tgcaggagga   480
aa   482

<210> 110
<211> 286
<212> DNA
<213> Homo sapien

<400> 110
aatcattctg cactcactgg gtgcatagca tggttagagg ggctagagat ggacagtcat   60
caactggcgg atatagcggt acatatgatc cttagccacc agggcacaag cttaccagta   120
gacaatacag acagagcttt tgttgagctg taactgagct atggaatagc ttctttgatg   180
tacctctttg ccttaaattg cttttagtt ctaagattgt agaatgatcc tttcaaattg   240
taatcttttc taacagagat attttaatat acttgctttc ttaaaa   286

<210> 111
<211> 465
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(465)
<223> n = A,T,C or G

<400> 111
agctactgtt aagatttgac agattgtctt gtctttttcc agtatatata ggtatctata   60
tatgtatata ctgtatatac ttatatatat ttattgtatt aaatatatac atatgtatat   120
gtatatataa gtatgtgtat atatgtatat atttaataca attattaaat tgtattattg   180
tattaaatgt atacatatat acacacatat atatacatat gcatatattt aacacagtta   240
aaataacact aaatgtacca ttttgtttct ggcctttttca gntaatgtta tgaagaattt   300
ttctattttg ttaaacttct ccaaaaacat taaactgcat tatgttctga gagtagatgt   360
accacaatta attctaccat ttctgtattg ttggccatgt aggttgttct taatttttctc 420
attattatga atgcatgtga caatcattgg ttttgcctaa agttg   465

```
<210> 112
<211> 773
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(773)
<223> n = A,T,C or G

<400> 112
ttttttttca gtttttgcag ttggtgtggt tagcagatac tttcttagaa taaaattgat       60
aactcaattt gatttttaaa aagttgtttt agtgatttaa aatgttgata tggaaaaata      120
ttaaacatta tatagatagt aggcaaattc atatcctaat tgcaatatta gcttgtagca      180
ttttaaatta aaatctaaat ttcttgatat attgccacat tagttgtaat gtttaataaa      240
tggtggttaa agatttattt gtaatttaat ctgtgtactt agttgccatg gacctctctt      300
ttagcttttc ataaataaat atcctttaat accttacctc ctcccttcaa ttgactgatg      360
ctgggatagg gtgttctttg gagcttatct tggtaaagaa ggtcagaagt gacatataac      420
cctattccct aggggccgag ggtgctttcc ttacagagtt gtattttaag tgagtcaact      480
cctgagccag catctactaa gagaaccttc aaacataatc ataggcattt aaataatttg      540
aaaaatcaaa ttccttgcat taaaaacatt tatccttang ttcatttctt tataanggtt      600
ctcttttaa aaaaaaggat tggtatttat gaaagggaat ggtggctggg ttttttcttaa      660
gcattatgna aaggggggagt accccctattt ttctttctcc ccanggaaaa tgggtgaagg      720
gaacctgggc aatgcccatg attgnaaaaa ttccactttc nttgaacaat ggg             773

<210> 113
<211> 543
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(543)
<223> n = A,T,C or G

<400> 113
gtttttctga tttgaaaaat tgtttataat attactataa gatgagatta acaatctttg       60
taaaaatcag attatgtttt gggcttaaaa aaaaccctag tgttttctac tattagtgta      120
ctcaaatgat ttgtgagtga tagtactcaa atgagaattg catttaattt gtacatagtt      180
aaatcgtctt gttttgaagc acaaagtcag gatgtttctc atcagaattt tctgtttgaa      240
tagggaaaag tggcattggt catgaggcat cattaaaaac ggaaagcaga ggaaaaattg      300
gaaagctaca gaaaaaagat tcacatgaaa aaccaagctg aagaaaaaag ctgcagaaca      360
gtttcgaatg cgacttaaaa aattaagcca agatgnaaat gaagctagaa agggagatct      420
cagaaagaag ccagccgagc ctgtcaaaca actggatgtc cagaaaaata ttcaggttcc      480
ccaggggaaa gcatgggtac tgggtttgan gcttggaaga nggagactgg aaggaaagaa      540
tga                                                                    543

<210> 114
<211> 550
<212> DNA
<213> Homo sapien

<220>
```

<221> misc_feature
<222> (1)...(550)
<223> n = A,T,C or G

<400> 114
ggaaagaggt aagcggtaaa ttacatagac tgctggagga agagtgttcc agtggagaga   60
aacagagcta gtgcaaaggc cctgaggtga gagcatgcct ggtgtgatcc ggggatggca   120
aggaggccag ggtggtggat gaggagttag caaggaggan agtacgagga taagaagcca   180
ncaaggaaaa atggcagtgg ggcggatcac ctangggtct agtacgccat tgtgaagact   240
ttgccttttg ctcccaantg gaatgggtac tcnttgaagg cttttaancc caggaanaaa   300
cattgattga tttanaagtt taaanggatc acntttgggt attgtggcca acaagacact   360
gcgggaagaa gcaagaaggg tagaaagcca gnaaaccaac tnaggaggct tttgcagtaa   420
tcctggntga nanacantgg tggtctnggt taaaaagttt tggaaaaaat taaaactgtt   480
tgatggtttg tttcctgttc ttgggggcnt aggcattcca actccttacc gaaagggtta   540
ccccntttga   550

<210> 115
<211> 550
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(550)
<223> n = A,T,C or G

<400> 115
caatgtggca cttaacttan tgggtacaac tgtatcacat catgtgtgaa tcgtgagacc   60
actcaaatct ctctctggga aaacncggct gctccccga tggctggcag gtgttggaac   120
ctcggtctcc cgtccgtctc tggggcaagg tgggtttcct catgtatngc aagagtctat   180
cgtgcggtgc ttctctcttg gcatacagct cacagctctt tggcctatac agtgtggaaa   240
tttatnctcc ggtgctggag gtgttaatgg gaaagagctc ggttaaatgc acttctcact   300
tggcccgtgg gtgatgctct acatgactga attcntctct nacggggact gacattgtat   360
ctatacacta natccttcca ccanagtggc gttaaggacg gtgtctggga tggaanctga   420
cggtacangc cccanctctc tgaaatgagt ccananatga actacctgca tacctctcta   480
aatcactctg gtctggcatg ntctccgtgc cgaaacatat atatgtatgt ctctccncat   540
acgaaaanaa   550

<210> 116
<211> 463
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(463)
<223> n = A,T,C or G

<400> 116
cacaatgtgg tactttactt agttggtaca actgtatcat atcatgtggt gaatcacgtg   60
tgacgtgact ccgcaactcc gcaccagact acactgcacg taatnacagc cngcacncca   120
ggtggacaaa nattgacgca atgttgtgtc antgccaccg tgccacacca cctgtggagg   180
acgtcagtct tctcttcccc caaaacccag gaccctcntg atctcccgac cngaggtcct   240
nggttgtggt gactgagcnc aaaaccgagg tcgttcactg gtacttgacg ctggagtcat   300

```
atccaganaa agcccggaag acatcacngc cttcgtgtgt cnctctcacg tctgcacaga    360
cggctaacgc aggatcattc angtccacaa gctccacccc tcanaaactc tcnaacaagg    420
cagccgaaac acgtttccct gccctccgga gaatacanaa cag                      463
```

```
<210> 117
<211> 503
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(503)
<223> n = A,T,C or G
```

```
<400> 117
nncactnatg tgctacgtta acttagttgt acaactcgat cctatccatg tggtgaattc     60
tctccagcag tacactgang atacanctta ttgttattga cgtgcgctgc gctcactacc    120
gncagccagg gaatgcgcct caggaaccct ggtgcccacc ctggctggca tngccattgt    180
caaggaagag aaacgagntg ccattggagc cctcctactg ccatgagggc ctgaaacaaa    240
ctgtgntatg ctctgcgaag gtctggtgct aaggtcccgc tggctcacta tggcacacca    300
ctcngggctg aagttgtggt cctgaaggta ctcancccag tgtggccggg acctggatac    360
gtgcacattg ccgtgtcgca aaaccagcat tgtatgtgca catgtagttt gttccactga    420
atgtcnctgc ggcctcagat ttcagggaga ttgactctca tctcnttgtc ctactaagag    480
agagcacctc acctgaatgt caa                                            503
```

```
<210> 118
<211> 560
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(560)
<223> n = A,T,C or G
```

```
<400> 118
tgggggnnca ctaagtgcta cgttacttag ttgtacgact cgatcctatc atgtggtgaa     60
ttctgnagcn tggtctcatg agcctctctg gtgcgctgtg tgtatnggta cggcgctctc    120
tatcgcttta tctcttctga ctcgcaccgg ggccggcggc atcaccggcc aagaccctgc    180
acaatgaaga ctgcaggagc aggcgggtgg cccacctggc cctggacctg aagaccnaaa    240
ctggagcagg ctcgngccgg aggactgggc accgcctaca ggccacgtca cccacggtgg    300
ctggnanaac aatgaaaaca agaagaactt ctctacccaa gagagaagtt caaaaccncg    360
aactcactgt cgggaaattg actaaaactg cngaactgaa gaaaacaacn caaagccnnc    420
tnaagcanag aagngaactg agacgaacat catccnccna actaatgaaa agagagacgt    480
tccctgnaga gacnaagaga gagaaagagc cccagacngc cccggactaa gattctaata    540
agagcttgtt gtgagagaag                                                560
```

```
<210> 119
<211> 638
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
```

```
<222> (1)...(638)
<223> n = A,T,C or G

<400> 119
acaaaagtgc tacgttactt agctgtacga ctcgtcatat ccatgtggtg aatcatacgc        60
tattttatat acngtngatc aacatgaagg gttngtgtct gatcccgcgc atcaaaacac       120
gtgttacttt gactccccaa acctactcta gtaataccta ctattgacca gaaccttaca       180
ttacataaac agttnccata ttctgtatat atatgtatac tgtattctta ataagtaagc       240
taagaaatgt tattgaaatc ataaggaaaa gaaatgtatt atacactgta tgtattgtct       300
gtantgtact gtctgttaca agatgatcgt ctgatgaatg atgcgctgca ccccaactat       360
gtattacaaa caatcncttt tcattgtgtc tgacttgctt ctgaaatact ccacacncta       420
tngctttata tggtcctggt gtattcaggt tatntatgcc taactgaaaa tcccagaacc       480
tgaagatatg tttctgtgat cncattactg ganaaagaac gcccatcaat actcnccgng       540
tttaacggat ccccacctga cnccgcatac acagagtgta naatttgtnt acacttntca       600
cgtanctagc tttgaataac gctcttcttt ttcttccc                              638


<210> 120
<211> 434
<212> DNA
<213> Homo sapien


<220>
<221> misc_feature
<222> (1)...(434)
<223> n = A,T,C or G


<400> 120
ngnngggggca caaaagctgc tatgtttaac ttagcttggg tacgactcgt tcatatccat        60
gtgnttgant caccgctcta ctgccaagca tcattttggt tctacgnctc aanctgtgna       120
aangatgtgg gttaggggan tgaagatgca aacncctagg gtangggcat ttanaactga       180
aaaggananagg aaganaagac ctgcgaacgt gggggataag actanaagaa agacgggaga       240
naatantgtc tttgancctc aaatggaaca tntcccatcc tatctgttan aaancaccan       300
gtaaaatggg atgtntgcac naaagaataa gttaaactaa acnccggacn gtgactanaa       360
aatgaangac cacanatgaa aaggcgatga ctngcctgtt tacctancct gtanacctat       420
attttcnggg ttat                                                        434


<210> 121
<211> 631
<212> DNA
<213> Homo sapien


<220>
<221> misc_feature
<222> (1)...(631)
<223> n = A,T,C or G


<400> 121
caaagcgcta tgttaatgag cttgtacgac tcgtcatatc ttgtggtgta tcatattctc        60
tctctcttc aacaaactcc ccagctccac ccgggctcta cctccgagac caggganccaa       120
aacgancgaa gatggctgct ctgcgcgcca cgccgcgcca ctcccgctgc ccccggcccc       180
gattccttgg ataaaganaa gaatcgcaag aaaccatcaa tcgcactctc cttctccggc       240
gctcgncgtt ccggctccgg gtcggatgct gcaaatgctg ggatgccgag ntgtgcgcgg       300
gcccagntgc gcacggttac acacaccact ctggactgga gaagaatcat ttatanttct       360
gtgccgcacc cgcgtcaaat gcgcttgctg aactcacgaa agnagtcaat ntgttctaac       420
```

```
gngctgaaca cacgcagacc ncacnaaagc gccgatggga ctgctgccgg aacctggaga    480
ctctcaactc caagaaccgc gcaaccgggc ggcctccgct ccggcgntgg gaactgtntc    540
cccccgaagt tgttccggnt taacgcgacc cggttanctt cgtnaaaggg ngggcctnaa    600
ttcggtgcct tncnggcggg gggtgaccgc c                                    631


<210> 122
<211> 678
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(678)
<223> n = A,T,C or G

<400> 122
caaagcggct angttaatta gctggtacga ctcgtcatat catgtggtgn atccacacat     60
ggaatgaggg tcccgctcac tctggggctc tgctgctctg gtccatgtgc cagatntaaa    120
tccagatgac cagtctcctc ctccctgtct gcatcggtgg ganacgaatc accatcactt    180
gncgggcaat caganattan aaatgattaa cctggtatca gcagaaacca gggaaaccct    240
aagctctgat ctttgctgca tcagttacaa gtggggtcct tcncgcttca cggcagtgnt    300
ctggcacaga ttcatctcac atcncagctg cagcctgaaa aatttacact tatactgtct    360
acggataaca ataccctgna cttcggcaag gactanggtg gaatnaaacn aatgtggctg    420
cacatctgtc ttctcttccc gctctgataa cagtnaaatc tgaactgctc tgttgtgtgc    480
tgctgatact tctatccana aaagccaagt acatggaagt gaatacgcct ccaatcggtt    540
atccagaaat gtccaaanag gaacaggacg nctacgctcg cacncctgac ctaaccancn    600
aatcnaaaac caatctnccc gcaatccctc gggctgaccc ctccaaaact ccngggaatt    660
taaggaaatc cccccccc                                                   678


<210> 123
<211> 445
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(445)
<223> n = A,T,C or G

<400> 123
gagggggggng caaaagcgct acttaattag ctgtacgact cgtcatatca tgtggtggat     60
cagcatccag atggcataat cggctaatgt cctggggttc agatgtatgc gatgtccggc    120
taatgtgaca tcttgccanc tagcttaagg anggctggct agaagacatt gcagaaacag    180
gagctcggcc cacangtttc ccaaggctct caccccattc catctccagg gaagctcgcc    240
cagtggcact gaatggcctc ctcagcggag ggtttggaat caggctgggc aagaactgct    300
aatcttgcgc ggactggaac cagctctccg gccttctctg gctccttggt tctggtgggg    360
aagggaagag ggaaaagaaa ggaaatctcc nggcananga ngggacaccc canacaccga    420
agacacnccc ccctcctgta actgt                                          445


<210> 124
<211> 641
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(641)
<223> n = A,T,C or G

<400> 124
gagggggggg ncaaagcgct acgttaatta gctgtacgac tcgtcatatc atgtggtgga         60
tcccactaca angttgtcac tatatattan atctatagtn gagtcngtnt tccccatccc        120
tgtaaacgaa tttactattg ttggggtagt gtccctactt tcctgattaa ggatctgtgc        180
tggggaacaa gcnttgcata ccttatatgt agttaanatt tattaacata tcctcatgan        240
ctcattcaca ctgnanctct cctnaaaatn gtgtgctcct gttacattan aactaatctg        300
aaataaagac tctcnaatgc tgtgcaacat anttactgtn tgaaggagca gtgtnaattg        360
agtaccaatt tagcatcgat ttgaaacgca ccttatttga actgtgaata aacactttct        420
gcgtatacta ctgcttacat ccaattcngt gatttaagat actcgtggta tagatacact        480
gattgaagtc cgatatatgc aaaactcctt cataggattg acatgctgat ntnagtgngc        540
nttcaatgtg gagtatactt acntaattgc taacgtataa agtattgaan gtnnaatagt        600
cagcttcngt gnaaaatnng aaattagtat ggtncngttc c                           641


<210> 125
<211> 285
<212> DNA
<213> Homo sapien


<220>
<221> misc_feature
<222> (1)...(285)
<223> n = A,T,C or G


<400> 125
aggggngcac aaagcgctac gttaatnagc tgtacgaccg tccatatcag gtggtggatc         60
catatgtccg gtattctctg atgtcangct tattataata gtaccaaccc ttcatctctg        120
aaatgtctgg ttctggttcc ctattatata ccagcactga aaatattcgt atcttagnan        180
caaaagcatt taaaaagagt taaaaattta ntcatcacta tgcacttcaa ggggagaagc        240
tncactgcnt ncttgagnct angcaagatg cnagcnccct ggaag                        285


<210> 126
<211> 282
<212> DNA
<213> Homo sapien


<220>
<221> misc_feature
<222> (1)...(282)
<223> n = A,T,C or G


<400> 126
agggnntgac aaagcggcta cgttaatnag ctggtacgac cgtcatatcn tgtggtggat         60
ccngaacang tagcctcata atcacaacat ccattagcca cagtaaactg attctgtaac        120
tccactggca atgctgattg gtaatggctg cataaaccca gtgtatcaat ttantttcgg        180
ttttgagaca aaatctcata ttatacnctg acatctcnaa cttcgataca tgaccaaata        240
cgggnagaca ttattcaaan atatttacct tacanaaaaa aa                           282


<210> 127
<211> 634
```

<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(634)
<223> n = A,T,C or G

<400> 127
acaaagcggc tacgttantc agctggtacg accgtccata tcatgtggtg gatcntgaaa   60
anctttgatc ggctgcggtg gaaacgttgt cngggccggc aagaagagcc gctgtnacaa   120
tggtgtcatg agttcagccg aacgcangac ggttctcaca cccgtgctgc ggtgttgcca   180
tgtccgcacg ggacaatatc ctggggaccg gtactggtag taactatgat gcattntgct   240
gantgtgaat gatctcaact catgccagct gtcacattca tagaattctc gtaatatatc   300
ntcgaaaaat ggtaanatgc tgtgtctttt gccgtcctgt tctatgttta tatcagtcag   360
ctgttatgac attctatcag tggttggctg atccatctct gttacnactt tgactcgtct   420
cattgccgtt gctatagtcc tcactattgc cagatcaaaa tactgatcac tactaattcc   480
nacaananac tctggctgga ccactgcccn gtcatgtctg tgtcttgcta tcacatttaa   540
gctactatta ctgtgttgga atgcataatc tcacaacnaa gtgcgaaatg ngtttccgcc   600
ttgaatacnc cctactttgc ccctataaag gcgg   634

<210> 128
<211> 180
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(180)
<223> n = A,T,C or G

<400> 128
caaagcgcta cgttaatnag ctgtacgacc gtccatngtc aggtggtgga tccctgttat   60
gtcaagaaaa gtaaatcgtc tcttcaataa ggcctttatt tgggacaggt ttatttcctg   120
atatnatntc ttttatactc ttttctctca gaaanaaaaa agtngtntnc tcttattgtc   180

<210> 129
<211> 567
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(567)
<223> n = A,T,C or G

<400> 129
acaaagcgct atgttaactt agctgtacga ccgtccatng tcaggtggtg gatcctcccg   60
tgtgctggat tcataatgga tctatttaga cagttgagaa taaattattc tattacaata   120
atagatgcta atatatatat tatgctgttt ggatatctaa atatttgctc acatccttaa   180
tatatttta aaattctaac aatagtactg ttganataaa gttgagccat attganacnc   240
tcccanattg gtcctagaaa gttacactgg ttgtctctcc ttatgtcctg ttatccaccc   300
tgacgctgcc gctttatatt cttaatgant tggacggaca gtggtatccg atcgttttga   360
cgacgttaca ntactnacca tctatacgtc tacttaattg acagcagatt tcgtagcnct   420

```
cattaggatc tgttccaacn gttggcaaat naccncggan gaagttccng tagttgtcnn    480
ctcccctat tgaaacttat gaccnatctt cctttacnca catatcgacc ttcctgacaa    540
cnccttttnn aaagaactct tcnccca                                        567
```

<210> 130
<211> 557
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(557)
<223> n = A,T,C or G

<400> 130
```
agggnntcac aaaagcgcta cgttaatnag ctgtacgact cgtcatatca tgtggtggat     60
cccgcggcgt gcggactgga tgtcaaactc tgcctgcggc gatgcgccga tcggcgcccg    120
ggatacgtgg caagcgcggg cccggcgcca gccgcactct cccanccgtgg cgtggccacc    180
cggccaagca gaatgggtcc tgcagctgcn gtctagcngt ctgcaccaac acgggtggtg    240
gtgcagcnaa gtctccggaa tccncaaggt ctattnaatt ctgtgggaaa ttanatctca    300
actcaatagg cctttccaaa gaactattgc atgatattca acaagtaatt tcttatttca    360
atacactccg tatcagaatc atgttctttc tcgatctctt ccatcctccg aacagcctgc    420
antgactgtt tcacctagac aannaataca tccttggtat tgggactcag cataactgtc    480
aaatatgcta tcnactccna tcnaagaaat ctttccgaag ctgtatttga ttcattaatt    540
tatccacatt actggat                                                   557
```

<210> 131
<211> 655
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(655)
<223> n = A,T,C or G

<400> 131
```
agggnggcac aaagcgctat gttactgagc tgtacgnctc gtccattgtc ntgtggtgga     60
tcntcggatn aggtctgata tacttcctgt gngatcnaga tgnatctncg tagntccccc    120
cgttggatgc tgctcatnac tgctgcattt ccacgatcca ccctgtnatg gctatcctgc    180
tatacacaac ngcatgatnn gatatggaat cctccacaat ggaagtgttc tgttatgacc    240
caccacctta tatncngccg ctgtctgaaa ctcaaaccct ttgcctgtnt cagancacga    300
tcngttatgt tactgatgaa gaaatggaat actcccaaaa acagtgctcn gccgcaaatc    360
ctacttccng caaatcnact gcgtctctta atcctaactc ctctccatan aanctacagt    420
tactccgtga agccntgaag gaaatgggan agttatagga aactntcatc gttataagcc    480
anaatgcntg attaaataaa tcgtctttng tgataacctc atcttcactc ngttatacct    540
atcgttactn canaanccct attgaanttg aattgtnttg aaactgccga aaaaaacgtt    600
cttatgtttc ccggaccttg ggggatcaat aatccaatag cntactcttc ncgcc          655
```

<210> 132
<211> 566
<212> DNA
<213> Homo sapien

```
<220>
<221> misc_feature
<222> (1)...(566)
<223> n = A,T,C or G

<400> 132
agggtnncac aaagcgctat gttacttagc tgtacgtgtc gtcattntca tgtggtggat      60
tcgagcatca cagctctacg tgtgtcagct ctcacgtctg caccagacgc tgaagcaaga     120
gtacagtgca agtctccaca agcctcccag ccccatcgag aaacatctcc aaagccaaag     180
ggcgcccnaa aaccacngtg tacacctgcc ccatcccggg agaaatgacc agaacaagtc     240
gctgacctgc tggtcaagct ctatccagca ctccctggaa tgggaaacat ggcanccgaa     300
acactacana cacnctcccg tgctggatcg acgtctctcc tctatgcanc tcacgtggac     360
aaacagttgc acagggaact ctctctgtcg tgatgctgan ggtctgccaa cactacccaa     420
aaanctctcc tgttcccggt tataatgcga aggcggcanc cccnctcccg gntctcgcgg     480
tccacaagat gntgcacntn cccgtctatt cttccagcac ccanctggaa ataagcnccn     540
ccatgncctg ggccctgaaa aaaaaa                                         566
```

```
<210> 133
<211> 816
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(816)
<223> n = A,T,C or G

<400> 133
agctngggct nagcgtataa aacttaagct tgggtnaccg agctcgggat ccactcagtc      60
cagtngtggg tgggnaattc ctngnagcca ccctnacagc cagtaagnag atatngtagg     120
gtaaattgtt aagggnaagt cagcacttac attaaagtaa aattgggctc acaaaccccg     180
nacacagtna gcattttgtn gccaatttct gggttgggaa tgggtgaaca aacattgctg     240
ggaagccaag tngctnaaca ttgccttggg ttcagggggg natgggnaaa gtcacccgtt     300
aaggggatgg gcaattgcca gtgggaaacc caccgcttgc ttgaaggctc tgggacttgc     360
atccttacca cccaaactcc gtccaacttg acaaagccc ttggccgcct tgcctctcca      420
ggaatgtctt acaaaaattg ggtgggttat tgggttactg gttccttgtt gggcccgaan     480
ttgggaaaaa cttgggttgt tctcaaaacc cgggttattg ggttgggtca ccttttggct     540
cccagnttca aacgtttaca aacggggaaa gtnaaaaatc ttgttcgaaa aattgccacc     600
cattgnaaaa gcttttggaa nttggaaaac tcttccttgg gggggacaaa ttgtttgggg     660
gctttccaat tgntcaaaaa aattgttgtt cttgttcaaa agggatgttt nccgttccgt     720
ggggccaaac cgttttgctt gggttgaaca gccaaaaaaa tttgnaancc ccacccaant     780
tggggaaagc caagcnttgg ggtttcactg gcttcc                             816
```

```
<210> 134
<211> 451
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(451)
<223> n = A,T,C or G

<400> 134
```

```
tttgnangag  agggtcacct  gggcagccct  gacttttgtc  ccctggcaaa  gggaccttca         60
gtgaccttgg  ccctaggaga  gcctctgagc  acgtcagcca  tgtcgaaccg  ctcaggaagg        120
gcagcaagaa  tttggcttct  gacctctgcc  tctcctactc  gccatctgca  ctgggtgtgg        180
ttgtgcccat  tttacagatg  aggaggctgg  ggcatcgacc  agctgaatgc  cttgtcccag        240
gtactgcgta  agcagagctg  gcagttgaac  cccgtgtcct  ggttgtcgct  gggggtgggc        300
tgcaccctga  cttgtgaggc  cagnagcaag  gnttgcacgt  gacttcgtga  ccgtcaccca        360
gctctgcagc  acatcccgtg  acccanctca  tccaggccgn  atgcaaacct  gttgccaggc        420
ganaaaacca  agtcaccgca  canctgtggg  t                                         451
```

```
<210> 135
<211> 658
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(658)
<223> n = A,T,C or G

<400> 135
```

```
gtggtatctg  ccttcccagg  aggcaggagt  ggggccccca  actgatgagc  tcatggtgca         60
ctcttagctt  ttaagacttg  tcatacaggg  tgcaataaaa  caaaatgtgc  cactcaaaat        120
gtactttttt  ggtatatttt  gatcttgctg  ttaagagggg  ctacaattca  gagaggctgc        180
agacacagaa  atagccctga  aaagctttct  tctctggcag  agatttgcaa  gtgctgagga        240
aatacacgtt  agtgaagtga  acagaggaga  aaagcatttc  tctgaggcac  accccacccc        300
caccttatct  gcctaattgg  atcaaggaaa  gattaactcc  caggaaaaac  agactgagat        360
cctaatgctt  taaaggtctg  actgagaaac  ttctccatag  gccactgtct  atcttcctga        420
gggcancttg  ggggagcccc  tgagagactc  acatcttgtg  tggggacagc  cttggctcac        480
caagcatacc  tctctctctt  ccccattacc  tgaaacccac  ctcccnaaaa  ccccagcccc        540
tattctctct  gtagcctcag  gatgtgaaga  aatcttcatc  attgggcctc  ttggagctca        600
tatttgctgc  tcntgtnntg  tatatnaatt  attgcattta  tggtaatatt  cctttgcc          658
```

```
<210> 136
<211> 478
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(478)
<223> n = A,T,C or G

<400> 136
```

```
gaagtctcgc  gagtataaga  acagtaacca  gctccgggag  taccagctgg  aagggatgaa         60
ctggcttctt  tttaactggt  ataacagaaa  aaactgtatt  ttggctgatg  agatgggcct        120
agggaaaacc  atccagtcca  tcacattcct  ttcagaaata  tttctgagag  gaatccacgg        180
cccttttctc  attatcgccc  ctctctccac  catcactaac  tgggagcggg  agttccggac        240
atggacagag  atgaatgcca  ttgtgtacca  cggcagccag  atcagcaggc  agatgatcca        300
gcagtatgaa  atggtgtaca  gagacgccca  gggaacccct  ttcaggagtc  ttcaagttcc        360
acgtcgtcat  cacaacnttt  gaatgatcct  agcagactgc  ccagagttga  agaagaattc        420
actggaactg  tgtggataat  tggatgaaac  cccccagact  ggaagaatan  ggaactgc          478
```

```
<210> 137
<211> 612
```

```
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(612)
<223> n = A,T,C or G

<400> 137
gcaggggctc ttgcaaatta acacaaaata ataattaaaa atgaaacgaa attgaggata      60
ttcttagaaa gggtgaagga catgaaatac attactatct gggatttcaa cctttccaaa     120
ggtcaataaa tccccaaata aaatgtaaat ccaaggctac ctgagaattc catttctgtt     180
gcatctttgt tcatgatgag catatgtctt ttcattttga ggacttttta aaagagaaga     240
gtgacacaca atgcaacatg gacaaggaat gaaaattgct ttagacactg cactttgaac     300
atacaaacct gggaggtgcc agggtctgac actgtatatt tcttcctttg atctgattct     360
tccaaacagg atccatgtac tggcaaattt ccctagtgtt ccctggtaag catcaaagta     420
aaccactggt tggcctcggt atttctacat tggctttctc cattgntttt atacataaaa     480
aaaanaaaaa gaaagaaaac tcactgggca ttttacatgg ggtttccata ttggtcctta     540
atcattcagt ttgaaagtaa atcaaagagg aatgaanagt taaagngctt tgaaattggg     600
gtgaaaactt ca                                                         612


<210> 138
<211> 478
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(478)
<223> n = A,T,C or G

<400> 138
gcaggggctc ttgcaaatta acacaaaata ataattaaaa atgaaacgaa attgaggata      60
ttcttagaaa gggtgaagga catgaaatac attactatct gggatttcaa cctttccaaa     120
ggtcaataaa tccccaaata aaatgtaaat ccaaggctac ctgagaattc catttctgtt     180
gcatctttgt tcatgatgag catatgtctt ttcattttga ggacttttta aaagagaaga     240
gtgacacaca atgcaacatg gacaaggaat gaaaattgct ttagacactg cactttgaac     300
atacaaacct gggaggtgcc agggtctgac actgtatatt tcttcctttg atctgattct     360
tccaaacagg atccatgtac tggcaaattt ccctagtgtt ccctggtaag catcaaagta     420
aaccactggn tggcctcggt atttctacat tggctttctc cattggtttt atacataa      478


<210> 139
<211> 597
<212> DNA
<213> Homo sapien

<400> 139
gttatttggt agttttagag atgaggaact aaggacccag ttgctcagtg tttcctagct      60
agtgaataga gactagacac caagtgttct acgtgcagac tttatactgc tcagcctggc     120
acacaaaatg gcaatggcat agtccccaga ctgtggtccc aactgtctct ttcctaacag     180
ctccccaggc acccacactt ttctgcctct ttttcaatct gtacccttga ccctcctcct     240
ttttctgctt tgtcagactc cttaaggcac ttcataaatt aaccatttcc agggatttcc     300
cctcacacat gagttattcc agtggacagg gcagcctcat gggtgcctgt ggagggtgaa     360
gggtctgcct ggccgtaggt gtgatcacac actcccgttg taacccctgc ctcctgtgac     420
```

```
acttgctgcc ccacgattta gctgctttgt gttccgtgcc tcctgtttgc tggtgaactc    480
ctgagttggg gggcgtcatt ccctccactg tagttcttcc gcgatgctga atccacccac    540
ggtcagcacc actcggaaat acttcacagt cctgtagagg aagacaggtc caggttt       597
```

```
<210> 140
<211> 368
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(368)
<223> n = A,T,C or G
```

```
<400> 140
tttacatcta gactccacag acagaaacgt ttcattttta ttgagttaat tttgaaatat     60
atgaatccct gacccattgt tatcactagc tgttactcta tcaggacagt tgctgaagtt    120
ttttgtcact aaatttaaaa atcaactatc aggttgtccc ttggatgacc tgagatttct    180
agagacaaaa gaaatctatt cttcctgatt gaagaaagag tctgagattt tttttaaacc    240
actgatttgg ggatcagggt gtagccagtg tctcaaactc tcccctgtcc cttttttgtt    300
ttgctcaagg agtgggctnt gaggnctcaa gaattggggt ngttactggt ttatttttga    360
ttaggggg                                                             368
```

```
<210> 141
<211> 674
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(674)
<223> n = A,T,C or G
```

```
<400> 141
aatgtcaatc tttgctcggt cagtgaggat gtcgcctgtt gagggaaaaa tagtagctgt     60
tgccatattc ctttaactcc cccccccgc ccccgcaat atgtccctg aataaacttt       120
gtgggtagtt tttcttcatt cccagaactg ttatgaggta agttcagaaa ttgccagctt    180
cctgatgctc tatgctttga acacacaaaa taatcaaagg tgctctttag taggatcctt    240
tccctatcaa aataacagta acacccaatc tgaggcctca agcccactcc ttgagcaaaa    300
caaaaaaggg acaggggaga gtttgagaca ctggctacac cctgatcccc aaatcagtgg    360
tttaaaaaaa atctcagact cttttcttcaa tcaggaagaa tagatttctt ttgtctctag   420
aaatctcagg tcatccaagg gacaacctga tagttgattt ttaaatttag tgacaaaaaa    480
actttcagca actgtcctga taggagtaac caggctagnt ggataaccaa atggggtnca    540
agggggaatn tcataatatt ttcaaaaaat taaaccttca attaaaaaaa tggaaaaacc    600
ggtttttcntg gtcctggtgg ggaggttctt aagnatggta aaaaaaggaa atttccccac   660
ccaacnacct tggg                                                      674
```

```
<210> 142
<211> 669
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
```

<222> (1)...(669)
<223> n = A,T,C or G

<400> 142
gttggaaact tantcctcaa tgcaatagtg ttgagatgtg ggacctttaa gtgataatta   60
gatcatgagg gatttgcctc attcattaat tattgctatt atctcaggtg agttagttat   120
cggagattga aatcctgata aaaagttgag tttgttctct ctgtctctct ctctctctcc   180
actctagaat tgtaaaaaac taatctctat tctgcataaa ttacccagtc tcaggtattc   240
cattatatta gcaggaaatg gactaagaca ctactttata aaattttgca gtttccaatg   300
ttcagctttt ccttgatccg gcttcatcta catttttctt tgcttgttac tgatggtgaa   360
attttcctgt tgtctttcat ttatggctta cactatcaca tgctctctat taattcatgc   420
cttctatttc cttctgttgt ttttggaagc atctcttttc atgggctcat tttagctctg   480
taagacatat cgaaaactca cttgattcct cctgcatgca tagagctctg ctggggaagt   540
ctccttctgc atgctacgcc ttcccaccaa agacaaggct ttgcttattt gcncattctg   600
tttaacgtct gccaaatatg nggtcttgac ncataagaaa actggtttga nccgcaaaan   660
aaaattttg   669

<210> 143
<211> 501
<212> DNA
<213> Homo sapien

<400> 143
agaccttatt tggtaatctg ctgtcttcca gtgtctctgc attagatacc attactacag   60
tagcacttgg atctctcaca tctattccag aaaatgtgtc tactcatgtt tctcagattt   120
ttaatatgat actaaaagaa caatcattag cagcagaaag taaaactgta ctacaggaat   180
tgattaatgt actcaagact gatcttctaa gttcactgga aatgatttta tccccaactg   240
tggtgtctat actgaaaatc aatagtcaac taaagcatat tttcaagact tcattgacag   300
tggccgataa gatagaagat caaaaaaagg aactagatgg ctttctcagt atactgtgta   360
acaatctaca tgaactacaa gaaaatccat ttgttccttg gttgagtcac aaaagcaatg   420
tggaaaccta actgaagacc tgaagacaat aaagcagacc cattcccagg aactttgcaa   480
gttaatgaat ctttggacag a   501

<210> 144
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 144
gatatctcag cacctgactt acacatctta catcctcaag caaactcccc agggcacatt   60
tttagttggc cagccatcac cccagacttc tggaaaacaa ctcaccactg ggtcagtggt   120
ccaaggaaca ctgggagtca gcacatcttc tgcacaagga caacaaacgc taaaagtcat   180
ctctggacag aaaaccacat tgtttacaca ggcagcccat ggaggacagg catctctaat   240
gaaaatatcc gatagcacgt tgaagactgt gccagccacc tcacagctct cgaagcctgg   300
aaccacaatg ctgagagtag caggaggggt tatcacaact gccacttccc ctgccgtggc   360
cctctcagca aacggtcctt gccaacagtc tgaaggaatg gctnccgtgt cttcatctac   420
ggncaagttc tgtaacgaaa acttctgggc agcaacaaag tgtgtgtgan ccaagccacc   480
cgtggggaac cttgcaaggn t   501

```
<210> 145
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 145
ggaatccgag ccggctaccc cctctccgag cgccagcagg tggcccttct catgcagatg      60
acggccgagg agtctgccaa cagcccagtg gacacaacac caaagcaccc ctcccagtct     120
acagtgtgtc agaagggaac gcccaactct gcctcaaaaa ccaaagataa agtgaacaag     180
agaaacgagc gtggagagac ccgcctgcac cgagccgcca tccgcgggga cgcccggcgc     240
atcaaagagc tcatcagcga gggggcagac gtcaacgtca aggacttcgc aggctggacg     300
gcgctgcacg aggcctgtaa ccggggctac tacgacgtcg cgaagcaact gctggctgca     360
ggtgcggagg tgaacaccaa gggcctagat gacgacacgc cttttgcacg acgcttgcca     420
acaacgggca ctacaaggtg gtgaaactgc ttgttgcggt acnganggaa cccgnacaaa     480
acaacaggaa aagcgaagac c                                               501


<210> 146
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 146
ggcccggaca cggacaggat tgacagattg atagctcttt ctcgattccg tgggtggtgg      60
tgcatggccg ttcttagttg gtggagcgat ttgtctggtt aattccgata acgaacgaga     120
ctctggcatg ctaactagtt acgcgacccc cgagcggtcg gcgtccccca acttcttaga     180
gggacaagtg gcgttcagcc acccgagatt gagcaataac aggtctgtga tgcccttaga     240
tgtccggggc tgcacggccg ctacactgac tggctcagcg tgtgcctacc ctacgccggc     300
aggcgcgggt aacccgttga accccattcg tgatggggat cggggattgc aattattccc     360
catgaacgan gaattcccag taagtgcggg tcataagctt attccgcact tacctgggga     420
gaagcctttt ggtcttccgg ggacnaaaac agctttgttg ctgaacgcng gcagcaccgg     480
tcgcgccgtc cggtggttac c                                               501


<210> 147
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 147
cagcgccgcc gcccggcccc tccagcttcc cggaccatgg ccaacctgga gcgcaccttc      60
```

```
atcgccatca agccggacgg cgtgcagcgc ggcctggtgg gcgagatcat caagcgcttc      120
gagcagaagg gattccgcct cgtggccatg aagttcctcc gggcctctga agaacacctg      180
aagcagcact acattgacct gaaagaccga ccattcttcc ctgggctggt gaagtacatg      240
aactcagggc cggttgnggc catggtctgg gaggggctga acgtggtgaa gacaggccga      300
gtgatgcttg gggagaccaa tccagcagat tcaaagccag gcaccattcg tggggacttc      360
tgcattcagg ttggcaggaa catcattcat ggcagtgatt cagtaaaaag tgctgaaaaa      420
gaaatcagcc tatggtttaa gcctgaagaa ctggttgact acaagtcttt ggctcatgac      480
tgggtctatn aataagaagg g                                                501
```

```
<210> 148
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G
```

```
<400> 148
actcttagct tgtcggggac ggtaaccggg acccggtgtc tgctcctgtc gccttcgcct       60
cctaatccct agccactatg cgtgagtgca tctccatcca cgttggccag gctggtgtcc      120
agattggcaa tgcctgctgg gagctctact gcctggaaca cggcatccag cccgatggcc      180
agatgccaag tgacaagacc attgggggag gagatgactc cttcaacacc ttcttcagtg      240
agacgggcgc tggcaagcac gtgccccggg ctgtgtttgt agacttggaa cccacagtca      300
ttgatgaagt tcgcactggc acctaccgcc agctcttcca ccctgagcag ctcatcacag      360
gcaaggaaga tgctgccaat aactatgccc gagggcacta caccattggc aaggagatca      420
ttgaccttgt gttggaccga attcgcaagc tggctgacag tgcaccggtc ttcagggctt      480
cttggttttn cacagctttg g                                                501
```

```
<210> 149
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G
```

```
<400> 149
cgcccgggca ggaatagaag atgaacaaac ccataacacc atcaacatat gtgcgctgcc       60
tcaatgttgg actaattagg aagctgtcag attttattga tcctcaagaa ggatggaaga      120
agttagctgt agctattaaa aaaccatctg gtgatgatag atacaatcaa gtttcacata      180
aggagatttg aagcattctt caaactggaa aaagtcccac ttcttgaata ctgtttgact      240
gggggcacca caaattggac agttggtgat cttgtggatc ttttgatcca aaatgaattt      300
ttgctcctgc gagtcttttg ctcccagatg ctgttcccaa actgctaata cactaccttc      360
taaagaagct ataacagttc agcaaaaaca gatgcctttc tgtgacaaag acaggacatt      420
gatgacacct gtgcanaatc ttgaacaaag ctatatgcca cctgactcct caagtccana      480
aaataaaagt ttaaaagtta g                                                501
```

```
<210> 150
<211> 501
<212> DNA
```

<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 150
cagcacagga tactgatatt ctgtcagctg aaaagcatgc ttgatatagt agagcatgat   60
ctcctcaaac ctcacttgcc ctctgtcact tatttgagat tagatggcag catacctcct   120
ggtcagaggc attccattgt ttcccggttt aataatgatc catctataga cgttctgtta   180
cttaccactc acgttggtgg cctgggactt aatttgacag gcgctgacac agtagtattt   240
gtggagcatg actggaantc tatgcgagat ctacaagcca tggaccgggc ccatcgcatt   300
gggcagaaac gtgtggttaa cgtatccgat tgataaccag aggaacattg gaagaaaaaa   360
taatggggtt gcagaaaatt caagatgaac catagcgaat ctgttattag ccaagagaat   420
tcttagtttg canacatggg ggactgatca gctttcttga atctgtttac tcttggataa   480
gggatggcaa aagcagaaaa a   501

<210> 151
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 151
atggaggggt gtgtgtctaa cctaatggtc tgcaacctgg cctacagccg gaagctggaa   60
gagttgaagg agagtattct ggccgataaa tncctgnnta ctacaactga ccaggacagc   120
agaactgcat tgcactgggc atgctcagct ggacatacag aaattgttga attttttgttg   180
caacttggag tgccagtgaa tgataaagac gatgcaggtt ggtctcctct tcatattgcg   240
gcttctgctg ccgggatga dattgtaaaa gcccttctgg gaaaaggtgc tcaagtgaat   300
gctgtcaatc aaaatggctg tactccctta cattatgcag cttcgaaaaa caggcatgag   360
atcgctgtca tgttactgga aggcggggct aatccagatg ctaaggacca ttatgaggct   420
acagcaatgc accgggcagc agccaagggt aacttgaaga tgattcatat ccttctgtac   480
tacaaagcat ccacaaacat c   501

<210> 152
<211> 501
<212> DNA
<213> Homo sapien

<400> 152
gcccgccgaa gccgcgccag aactgtactc tccgagaggt cgttttcccg tccccgagag   60
caagtttatt tacaaatgtt ggagtaataa agaaggcaga acaaaatgag ctgggctttg   120
gaagaatgga aagaaggact gcctacaaga gctcttcaga aaattcaaga gcttgaagga   180
cagcttgaca aactgaagaa ggaaaagcag caaaggcagt ttcagcttga cagtctcgag   240
gctgcgctgc agaagcaaaa acagaaggtt gaaaatgaaa aaaccgaggg tacaaacctg   300
aaaagggaga atcaaagatt gatggaaata tgtgaaagtc tggagaaaac taagcagaag   360
atttctcatg aacttcaagt caaggagtca caagtgaatt ccaggaagg acaactgaat   420
tcaggcaaaa aacaaataga aaaactggaa caggaactta aaagtgtaaa tctgacttga   480
aagaagcaac aactggcatc t   501

<210> 153
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 153
```
agagagagag agagagagag gagcgagaga gtgtgagcga gaaagaataa aaggaaagaa       60
gattttctct atgtatataa agatggccac gttagcaaac ggacaggctg acaacgcaag      120
cctcagtacc aacgggctcg gcagcagccc gggcagtgcc gggcacatga acggattaag      180
ccacagcccg gggaacccgt cgaccattcc catgaaggac cacgatgcca tcaagctgtt      240
cattgggcag atcccccgca cctggatgag aaggacctca agcccctctt cgaggagttt      300
ggcaaaatct acgagcttac ggttctgaag gacaggttca caggcatgca caaaggctgc      360
gccttcctca cctactgcga gcgtgagtca gcgctgaagg cccagagcgc gctgcacgag      420
cagaagactc tgcccgggat gaacccggcc cgatccnagg tgaagccttg cggacagcga      480
gaaccgagga gatagaaact c                                                 501
```

<210> 154
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 154
```
ttccttcctg tgtgaggccg gctgagggca cttgctcttg ctgtttctgc ccctgggtta       60
acattcaaga tggtacatgc tgaagccttt tctcgtcctt tgagtcggaa tgaagttgtt      120
ggtttaattt tccgtttgac aatatttggt gcagtgacat actttactat caaatggatg      180
gtagatgcaa ttgatccaac cagaaagcaa aaagtagaag ctcagaaaca ggcagaaaaa      240
ctaatgaagc aaattgggag tgaaaaatgt gaagctctca gaatatgaaa tgagtattgc      300
tgctcatctt gtagaccctc ttaatatgca tgttacttgg agtgatatag caggtttaga      360
tgatgtcatt acggatctga aagacacagt catcttacct atcaaaaaga aacatttgtt      420
tgagaattcc aggcttctgc agcctccaaa aggtgntctt ctctatgggc ctccagctgt      480
ggtaaaacgt tgattgccaa g                                                 501
```

<210> 155
<211> 601
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(601)
<223> n = A,T,C or G

<400> 155

```
aggaggagga acagcaggag gaggaactca aagtactgct ggccctggag ggatatctca      60
gcacctgact tacacatctt acatcctcaa gcaaactccc cagggcacat ttttagttgg     120
ccagccatca ccccagactt ctggaaaaca actcaccact gggtcagtgg tccaaggaac     180
actgggagtc agcacatctt ctgcacaagg acaacaaacg ctaaaagtca tctctggaca     240
gaaaaccaca ttgtttacac aggcagccca tggaggacag gcatctctaa tgaaaatatc     300
cgatagcacc ttgaagactg tgccagccac ctcacagctc tcgaagcctg gaaccacaat     360
gctgagagta gcaggagggg ttatcacaac tgccacttcc cctgccgtgg ccctctcagc     420
aaacggtcct gcacaacagt ctgaaggaat ggctcccgtg tcttcatcta cggtcagttc     480
tgtaacgaaa acttctgggc agcagcaagt gtgtgtgagc caggccaccg tgggaacctg     540
caaggntgcc accccccgt cgtcagcgcc acgtncctcg tgctacacca accccatct     600
c                                                                      601
```

```
<210> 156
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 156
caagaaagga gaaagagagc tcaaaatcgg agacagagta ttggttggtg gcactaaggc      60
tggtgtagtc cggtttcttg gggagaccga ctttgccaag ggggagtggt gtggcgtgga     120
gttagatgag ccacttggga agaatgatgg cgctgttgct ggaacaaggt attttcagtg     180
tcaacccaaa tatggcttgt tcgctcctgt ccacaaagtt accaagattg cttcccttc      240
cactacacca gccaaagcca aggccaacgc agtgaggcga gtgatggcga ccacgtccgc     300
cagcctgaag cgcagccctt ctgcctcttc cctcagctcc atgagctcag tggcctcctc     360
tgtgagcagc angcccagtc ggacaggact attgactgaa acctcctccc gttacgccag     420
gaagatctcc ggtaccactg ccctccanga ggcccttgaa ggaaaaacan cagcacattg     480
agcanncttgc tggcnggaac c                                                501
```

```
<210> 157
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 157
caccctcttc gtcgcttcgg ccagtgtgtc gggctgggcc ctgacaagcc acctgaggag      60
aggctcggag ccgggcccgg accccggcga ttgccgcccg cttctctcta gtctcacgag     120
gggtttcccg cctcgcaccc ccacctctgg acttgccttt ccttctcttc tccgcgtgtg     180
gagggagcca gcgcttangc cggagcgagc ctggggggccg cccgccgtga agacatcgcg     240
gggaccgatt caccatgnag ggcgccggcg gngcgaacga caagaaaaag ataagttctg     300
aacgtcgaaa agaaaagtct cgagatgcag ccanatctcg gcgaagtaaa gaatctgaag     360
ttttttatga gcttgctcat cagttgccac ttccacataa tgtgagttcg catcttgata     420
angcctcttg tgatgaggct taccatcagc tatttgcgtg tgaggaaact tctggatgct     480
ggtgatttgg atattgaaga t                                                501
```

```
<210> 158
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 158
acggggtcac ccacacggtg cccatctacg agggctacgc cctcccccac gccatcctgc        60
gtctggacct ggctggccgg gacctgaccg actacctcat gaagatcctc actgagcgag       120
gctacagctt caccaccacg gccgagcggg aaatcgtgcg cgacatcaag gagaagctgt       180
gctacgtcgc cctggacttc gagcaggaga tggccaccgc cgcatcctcc tcttctctgg       240
agaagagcta cgagctgccc gatggccagg tcatcaccat tggcaatgag cggttccggt       300
gtccggaggc gctgttccag ccttccttcc tgggtatgga atcttgcggn attcacgana       360
ccaccttcaa ctccatcatg aagtgtgacg tggacatccg caaagacctg tacgccaaca       420
ccgtgctgtc gggcggnacc accatgtacc cgggcattgc cgacaggatg caaaaaggag       480
atcacccgcc cttggcgccc a                                                 501

<210> 159
<211> 501
<212> DNA
<213> Homo sapien

<400> 159
cgagcgggac tggctgggtc ggctgggctg ctggtgcgag gagccgcggg gctgtgctcg        60
gcggccaagg ggacagcgcg tgggtggccg aggatgctgc ggggcggtag ctccggcgcc       120
cctagctggt gactgctgcg ccgtgcctca cacagcccga ggcgggctcg gcgcacagtc       180
gctgctccgc gcgcgcgccc ggcggcgctc caggtgctga cagcgcgaga gagcgcggcc       240
ctcaggagca aggcgaatgt atgacaacat gtccacaatg gtgtacataa aggaagacaa       300
gttggagaag cttacacagg atgaaattat ttctaagaca aagcaagtaa ttcagggggct       360
ggaagctttg aagaatgagc acaattccat tttacaaagt ttgctggaga cactgaagtg       420
tttgaagaaa gatgatgaaa gtaatttggt ggaggagaaa tcaaacatga tccggaagtc       480
actggagatg ttggagctcg g                                                 501

<210> 160
<211> 487
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(487)
<223> n = A,T,C or G

<400> 160
aagatctcag tctgactctt ttggaacaag tcaaactgcc catgatgttg ctgatcagcc        60
aaggcctgga tcagagggga gcttctgtgc atcttcaaac tctccaatgc actcccaagg       120
ccagcagttc tctggtgtct cccaacttcc tggacctgtg ccacttcagg agtaactgat       180
acacagaata ctgtaaatat ggcccaagca gatacagaga aattgagaca gcggcagaag       240
ttacgtgaaa tcattctcca gcagcaacag cagaagaaga ttgcaggtcg acaggagaag       300
gggtcacagg actcacccgc agtgccttca tccanggcct ctttaacact ggcaaccaag       360
```

```
agaatggtta acccaggctt ttaaccaana accccacct tcctttcct gggggaacat      420
ttaggtcttc ctggttggcc ccttccttt anggaacctt anaatttgct tggttttcc      480
ccnaaaa                                                               487


<210> 161
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 161
ggttcccggc ccagtcccgt cctgcagcag tctgcctcct ctttcaacat gacagatgcc      60
gctgtgtcct tcgccaagga cttcctggca ggtggagtgg ccgcagccat ctccaagacg      120
gcggtagcgc ccatcgagcg ggtcaagctg ctgctgcagg tgcagcatgc cagcaagcag      180
atcactgcag ataagcaata caaaggcatt atagactgcg tggtccgtat tcccaaggag      240
cagggagttc tgtccttctg gcgcggtaac ctggccaatg tcatcagata cttccccacc      300
caggctctta acttcgcctt caaagataaa tacaagcaga tcttcctggg tggtgtggac      360
aagagaaccc agttttggcg ctactttgca gggaatctgg catcgggtgg tgccgcangg      420
gccacatccc tgtgttttgt gtaccctctt gattttgccc gtaccgtct ancanctgat      480
gtggggtaaa agctggagct g                                               501


<210> 162
<211> 501
<212> DNA
<213> Homo sapien

<400> 162
gaaaaagaaa aagaactaca acggcagaaa gaaaaggaaa aagaactaca aaagatgaaa      60
gaacaagaaa aggaatgtga gctggagaag gaaagggaaa aattagagga gaaaattgaa      120
cccagagaac ctaatttaga gcccatggta gaaaaacaag aaagtgaaaa cagctgtaat      180
aaagaggagg aacccgtttt cactagacaa gacagcaatc gcagtgaaaa ggaagccaca      240
ccagtggtgc atgaaacaga accagaatca gggtctcaac ctcggccggc tgtattatct      300
ggctatttca aacagtttca gaagtcttta cctccacgat tccagcggca gcaggaacag      360
atgaaacagc agcagtggca gcagcagcaa cagcaaggtg tacttccaga ctgttccttc      420
caaccgtcca gtagtactgt ccctcctccc cacacagacc tcttttcagc ctatgcagcc      480
tctcctcagc atttggcttc t                                               501


<210> 163
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 163
gagctcgacc agttgcctga cgagagctct tcagcaaaag cccttgtcag tttaaaagaa      60
ggaagcttat ctaacacgtg gaatgaaaag tacagttctt tacagaaaac acctgtttgg      120
```

```
aaaggcagga atacaagctc tgctgtggaa atgccttttc agaaattcaa aacgaagtcg    180
acttttttct gatgaagatg ataggcaaat aaatacaagg tcacctaaaa gaaaccagag    240
ggttgcaatg gttccacaga aatttacagc aacaatgtca acaccagata agaaagcttc    300
acagaagatt ggttttcgat tacgtaatct gctcaagctt cctaaagcac ataaatggtg    360
tatatacgag tggttctatt caaatataga taaaccactt tttgaaggtg ataatgactt    420
ttgtgtatgt ctaaaggaat cttttctaat ttgaaaacaa gaaagttaac aagagtagaa    480
tggggaaaaa ttcngcggct t                                             501
```

<210> 164
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

```
<400> 164
cgggtgcgcg cccacgaccg ccagactcga gcagtctctg gaacacgctg cggggctccc     60
gggcctgagc caggtctgtt ctccacgcag gtgttccgcg cgccccgttc agccatgtcg    120
tccggcatcc atgtagcgct ggtgactgga ggcaacaagg ggcatcggct tggccatcgt    180
gcgcgacctg tgccggctgt tctcggggga cgtggtgctc acggcgcggg acgtgacgcg    240
gggccaggcg gccgtacagc agctgcaggc ggagggcctg agcccgcgct ccaccagct    300
ggacatcgac gatctgcaga gcatccgcgc cctgcgcgac ttcctgcgca aggagtacgg    360
gggcctggac gtgctggtca acaacgcggg catcgccttc aaggttgctg atcccacacc    420
ctttcatatt caagctgaag tgacgatgaa aacaaatttc tttggtaccc ganatgtgtg    480
cacagaatta ctccctctaa t                                             501
```

<210> 165
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

```
<400> 165
ccggtgaagg accgcgaggc cttccagagg ctcaacttcc tgtaccaggt gagtctgcga     60
caagggcccc acggggacgg tgctcggcgt cccagagtga ctgctcccct cccgcaggcc    120
gcccattgtg tccttgccca ggaccccgag aaccangcgc tggcgaggtt ttactgctac    180
actgagagga ccattgcgaa gcggctcgtc ttgcggcggg atccctcggt gaagaggact    240
ctctgtcgag gctgctcttc cctcctcgtc ccgggcctca cctgcaccca ccgccagaga    300
cgctgcaggg gacagcgctg gaccgtacag acctgcctaa catgccagcg cagccaacgc    360
tnnctcaatg atcccnggca tttactntgg ggagacnggn ctgaggccca actcgggagc    420
caagcagatt ccaaaccact acaacccttg ccaaacacag cccactccat ttcagaccgc    480
cttcctgagg agaaaatgca g                                             501
```

<210> 166
<211> 412
<212> DNA
<213> Homo sapien

```
<220>
<221> misc_feature
<222> (1)...(412)
<223> n = A,T,C or G

<400> 166
atgtccaagc cggtggacca cgtcaagcgg cccatgaacg ccttcatggt gtggtcgcgg        60
gctcagcggc gcaagatggc ccaggagaac cccaagatgc acaactcgga gatcagcaag       120
cgcttgggcg ccgagtggaa actgctcaca gagtcggaga agcggccgtt catcgacgag       180
gccaagcgtc tacgcgccat gcacatgaag gagcaccccg actacaagta ccggccgcgg       240
cgcaagccca agacgctgct caagaaggac aagttcgcct tcccggtgcc ctacggcctg       300
ggcggcgtgg cggacgccga gcaccctgcg ctcaaggcgg gcgccgggct gcacgcgggg       360
gcgggcggcg gnctggtgcc tgagtcgctg ctcgccaatc ccgagaaggc gg              412


<210> 167
<211> 501
<212> DNA
<213> Homo sapien

<400> 167
aaatgcaagt tgatctggag aaagaattac aatctgcttt taatgagata acaaaactca        60
cctcccttat agatggcaaa gttccaaaag atttgctctg taatttggaa ttggaaggaa       120
agattactga tcttcagaaa gaactaaata aagaaagttg aagaaaaatg aagctttgcg       180
ggaagaagtc attttgcttt cagaattgaa atctttacct tctgaagtag aaaggctgag       240
gaaagagata caagacaaat ctgaagagct ccatataata acatcagaaa aagataaatt       300
gttttctgaa gtagttcata aggagagtag agttcaaggt ttacttgaag aaaattggga       360
aacaaaagat gacctagcaa ctacacagtc gaattataaa agcactgatc aagaattcca       420
aaatttcaaa acccttcata tggactttga gcaaaagtat aagatggtcc ttgaggagaa       480
tgagagaatg aatcaggaaa t                                                 501


<210> 168
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 168
ggggcccgcg gagctcgcgc caggctcctg ggaaaggacg gggagtgtta ccggggagca        60
gctgctccat tgtgcctcga ggccccgatc gggctaggcc gacggcctcc ctcccttcac       120
ctttcctctc ctggcggggt tcggcggcgg gcgagtgact tgcggccacg cctgaaaggc       180
gactctcctg attcaagatg accaacgaag aacctcttcc caagaaggtt cgattgagtg       240
aaacagactt caaagttatg gcaagagatg agttaattct aagatggaaa caatatgaag       300
catatgtaca agctttggag ggcaagtaca cagatcttaa ctctaatgat gtaactggcc       360
taagagagtc tgaagaaaaa ctaaagcaac aacagcagga gtctgcacgc agggaaaaca       420
tccttgtaat gcgactagca accaaggaac aagagatgca agagtgtact acttaaatcc       480
agtacctcaa gcaagtccan c                                                 501


<210> 169
<211> 501
```

<212> DNA
<213> Homo sapien

<400> 169
gctgtgcggc ggtcccgcgc ccggcgatgt tcccgggcac tccctgagta gcggcagctt   60
atccccgcc cgctagcccg ccctggtccc cggctcgctc gctggctggc gcggcccgg   120
ccccgctctg cgtcggcccc gccgcggtgg aggcgcgcga gggggacgcg gccggggatg   180
agcggattgc gggtgaactc gccgcccggg ggccccgcga agccgtgagc cgctgctttt   240
ctccgagtcg ccgccctgcc cttggatttg agatcatgtc catccacatc gtggcgctgg   300
ggaacgaggg ggacacattc caccaggaca accggccgtc ggggcttatc cgcacttacc   360
tggggagaag ccctctggtc tccggggacg agagcagctt gttgctgaac gcggccagca   420
cggtcgcgcg tccggtgttc accgagtatc aggccagtgc gtttgggaat gtcaaagctg   480
gtggtccacg actgtcccgt c   501

<210> 170
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 170
gcatcctctt gccgttcccg gtgtttgggc cttgcctgtg acggtgggaa aagaaaatgg   60
ccttgctgtg ctacaaccgg ggctgcggtc agcgcttcga tcctgagacc aattccgacg   120
atgcttgcac ataccaccca ggtgttccgg tctttcacga tgcattaaag ggttggtctt   180
gctgtaagag aagaacaact gattttctg atttcttaag cattgtaggc tgtacaaaag   240
gtagacataa tagtgagaag ccacctgagc cagtcaaacc tgaagtcaag actactgaga   300
agaaggagct atgtgaatta aaacccaaat ttcangaaca catcattcaa gccctaagc   360
cagtagaagc aataaaaaga ccaagcccag atgaaccaat gacaaatttg gaattaaaaa   420
tatctgcctc cctaaaacaa gcacttgata aacttaaact gtcatcaggg aatgaagaaa   480
atnagaaaga agaagacnat g   501

<210> 171
<211> 601
<212> DNA
<213> Homo sapien

<400> 171
agcgacctat cttgaactcc acagccttga tgacttctac ataggaaagt attttggagg   60
agtgttggag tattttatga ttcaagcctt aaatcagaag acaagtgaaa aaatgaagaa   120
aagaaaaatg agcaactcct ttcatggaat tagaccacct caacttgaac aaccagaaaa   180
aatgcctgtc ttaaaggctg aagcgtcaca ttataactct gacttaaata acttgctgtt   240
ctgctgccag tgtgtggacg tggtatttta caaccccaat ttaaagaaag ttgtagaggc   300
ccacaagatc gttctctgcg ctgtaagcca tgttttcatg ctgcttttca atgtgaagag   360
tcccactgac attcaggatt ccagtatcat ccgaactacc caggatcttt ttgctataaa   420
cagagatact gcatttccag gtgctagcca tgaatcttca ggcaacccac cattacgagt   480
cattgttaaa gacgccctct tctgttcttg tttatcagac atccttcgct tcatttattc   540
aggtgctttt cagtgggaag aattggaaga agatatcagg aagaagttga agattctggg   600
g   601

<210> 172

<211> 501
<212> DNA
<213> Homo sapien

<400> 172
gaccgtttaa aaaactggta tccagctcac atagaagaca ttgactacga ggaaggaaaa   60
gtactcatcc atttcaagcg ttggaaccat cgttatgatg agtggttctg ctgggacagt   120
ccttatttac gccctttaga gaaaatacag ctgaggaaag agggcttgca tgaagaggat   180
ggatcttctg aatttcaaat aaatgagcag gtccttgctt gctggtctga ttgtcgtttt   240
tacccggcca aagtcactgc tgttaacaag gatggtactt acactgtgaa atttttatgat   300
ggagtagttc agactgtcaa acatattcat gtcaaagctt tttccaaaga tcagaatatt   360
gtgggtaatg ctaggcctaa agaaacagat cacaaaagtc tttcatcatc tcctgataaa   420
cgagagaagt ttaaagaaca gagaaaagca acagtgaatg tgaagaaaga caaagaagat   480
aaacccttaa agacagaaaa g   501

<210> 173
<211> 501
<212> DNA
<213> Homo sapien

<400> 173
gcgacctatc ttgaactcca cagccttgat gacttctaca taggaaagta ttttggagga   60
gtgttggagt attttatgat tcaagcctta aatcagaaga caagtgaaaa aatgaagaaa   120
agaaaaatga gcaactcctt tcatggaatt agaccacctc aacttgaaca accagaaaaa   180
atgcctgtct taaaggctga agcgtcacat tataactctg acttaaataa cttgctgttc   240
tgctgccagt gtgtggacgt ggtattttac aaccccaatt taaagaaagt tgtagaggcc   300
cacaagatcg ttctctgcgc tgtaagccat gttttcatgc tgctttttcaa tgtgaagagt   360
cccactgaca ttcaggattc cagtatcatc cgaactaccc aggatctttt tgctataaac   420
agagatactg catttccagg tgctagccat gaatcttcag gcaacccacc attacgagtc   480
attgttaaag acgccctctt c   501

<210> 174
<211> 501
<212> DNA
<213> Homo sapien

<400> 174
cccccgggagg cgggccgtcg ggcgcagccg cgaagatgcc gttggaactg acgcagagcc   60
gagtgcagaa gatctgggtg cccgtggacc acaggccctc gttgcccaga tcctgtgggc   120
caaagctgac caactccccc accgtcatcg tcatggtggg cctccccgcc cggggcaaga   180
cctacatctc caagaagctg actcgctacc tcaactggat tggcgtcccc acaaaagtgt   240
tcaacgtcgg ggagtatcgc cgggaggctg tgaagcagta cagctcctac aacttcttcc   300
gccccgacaa tgaggaagcc atgaaagtcc ggaagcaatg tgccttagct gccttgagag   360
atgtcaaaag ctacctggcg aaagaagggg gacaaattgc ggtttttcgat gccaccaata   420
ctactagaga gaggagacac atgatccttc attttgccaa agaaaatgac tttaaggcgt   480
ttttcatcga gtcggtgtgc g   501

<210> 175
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature

<222> (1)...(501)
<223> n = A,T,C or G

<400> 175

```
ccaacatgac cgaacgaaga agggacgagc tctctgaaga gatcaacaac ttaagagaga      60
aggtcatgaa gcagtcggag gagaacaaca acctgcagag ccaggtgcag aagctcacag     120
aggagaacac cacccttcga gagcaagtgg aacccacccc tgaggatgag gatgatgaca     180
tcgagctccg cggtgctgca gcagctgctg ccccacccc tccaatagag gaagagtgcc     240
cagaagacct cccagagaag ttcgatggca acccagacat gctggctcct ttcatggccc     300
agtgccagat cttcatggaa aagagcacca gggatttctc agttgatcgt gtccgtgtct     360
gcttcgtgac aagcatgatg accggccgtg ctgccgttgg gcctcagcaa agctggagcg     420
ctccactacc tgatgcacaa ctacccactt tcatgatgga aatgaagcat gtctttgaag     480
accctcanag gcgagaggtt g                                               501
```

<210> 176
<211> 378
<212> DNA
<213> Homo sapien

<400> 176

```
ggcggaagag gtgatttatt atatggttgt tacactcggc cacaaataaa cacagaaata      60
gtccagaatg tcacaggtcc agggcagagg accaacatgg gcattttgtt tatgagcaag     120
gtgggtctca gaggtgatcg gcgatcagag ggcgatgaag ttctagatcc attgagacaa     180
gctctagaca gtagcatgca gtcccacaac ttgtaccagc atccccagcg tctggcattc     240
catgtttctg ctcctgtggc ctccacggtg caacaagcta gcggtttact tggacctctg     300
cctcatcttt cttcttttgc gcttcagcct gcgcattcgc ttcttcctcc acttggctct     360
catggcgcag aggtttcc                                                   378
```

<210> 177
<211> 501
<212> DNA
<213> Homo sapien

<400> 177

```
ggcagggagc tggacctgga ggcgccgccg cgacagcagc agccatggag gacgagatgc      60
ccaagactct atacgtcggt aacctttcca gagatgtgac agaagctcta attctgcaac     120
tctttagcca gattggacct tgtaaaaact gcaaatgat tatggataca gctggaaatg     180
atccctattg ttttgtggag tttcatgagc atcgtcatgc agctgcagca ttagctgcta     240
tgaatggacg gaagataatg ggtaaggaag tcaaagtgaa ttgggcaaca acccctagca     300
gtcaaaagaa agatacaagc aatcatttcc atgtctttgt tggtgatctc agcccagaaa     360
ttacaactga agatataaaa gctgcttttg caccatttgg aagaatatca gatgcccgag     420
tggtaaaaga catggcaaca ggaaagtcta agggatatgg ctttgtctcc tttttcaaca     480
aatgggatgc tgaaaacgcc a                                               501
```

<210> 178
<211> 501
<212> DNA
<213> Homo sapien

<400> 178

```
agccccgggc caggccgcgg ccggggcagg agcgcagggg ctttgttatg cacctaaagc      60
catattggaa gctccagaag aaagagcacc ccccggaagt cagcagggaa acgcagagaa     120
ctcctatgaa ccaccaaaag gctgtaaatg atgaaacatg caaagctagc cacataacat     180
caagtgtctt tccttcagcc tctctcggta aagcatcatc tcgaaagcca tttgggatcc     240
```

```
tttctccaaa tgttctgtgc agtatgagtg ggaagagtcc tgtagagagc agcttgaatg    300
ttaaaaccaa aaagaatgca ccatctgcaa cgatccacca gggcgaagaa gaaggaccac    360
ttgatatctg ggctgttgtg aaacctggaa ataccaagga aaaaattgca ttctttgcat    420
cccaccagtg tagtaacagg ataggatcta tgaaaataaa aagttcctgg gatattgatg    480
ggagagctac taagagaagg a                                              501
```

<210> 179
<211> 501
<212> DNA
<213> Homo sapien

<400> 179
```
cgggactagg agcgcggcgg ggccggcggc agagctgtcc ggctgcgcgg tggcccggggg    60
ggcccgggcg gcagggcaag cagcgcggcc tcggcctatg cgaccggtgg cgccggcgcg    120
gcttctgcct ggagaggatt caagatgacc aacgaagaac ctcttcccaa gaaggttcga    180
ttgagtgaaa cagacttcaa agttatggca agagatgagt taattctaag atggaaacaa    240
tatgaagcat atgtacaagc tttggagggc aagtacacag atcttaactc taatgatgta    300
actggcctaa gagagtctga agaaaaacta aagcaacaac agcaggagtc tgcacgcagg    360
gaaaacatcc ttgtaatgcg actagcaacc aaggaacaag agatgcaaga gtgtactact    420
caaatccagt acctcaagca agtccagcag cccgagcgtt gccaactgag atcaacaatg    480
gtagacccag cgatcaactt t                                              501
```

<210> 180
<211> 571
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(571)
<223> n = A,T,C or G

<400> 180
```
gagcgtaccg ggttttctcc atgctgtttc ttactctcct cttttgcacc cctcccattt    60
ccctcgtttt tctttgaaaa tttctcccccc ctccagttcg ctgtccggcc ctcacatgtg    120
tganagggggc agtgtgccgt taatggccgt gccgggcacc gggccgctct ggtagtgctg    180
ggacatgtga agtctgctgg gggcggcggg ttccggcacc tcggcgccgg ggagatacat    240
gctgatcatg tcccggaggt ccccggcctg gcaggcgcc ctggagtggg aggaagaggt    300
aaccacaggg gggctggagc tggcctcgga cttgaccacc gaacccatgg agccaanagc    360
catgccaggg gtgccctgct gcgagtagga catgctgtag gtgggcgagc cgttcatgta    420
ggtctgcgag ctggtcatgg agttgtactg cagggcgctc acgtcgtaac ggtgcatggg    480
ctgcatctgc gctgcgccgt gcgcattgag gcccgggtgc tgngggtagc ccaactggtc    540
ctgcatcatg ctgtactgcc gntgctccac c                                   571
```

<210> 181
<211> 501
<212> DNA
<213> Homo sapien

<400> 181
```
tgagaccgcc aagatggtgg tgggcgcgtt ccctatggcg aagctgctat acttgggcat    60
ccggcaggtc agcaagccgc ttgccaaccg tattaaggag gccgcccgcc gaagcgagtt    120
cttcaagacc tatatctgcc tcccgccggc tcaactgtat cactgggtgg agatgcggac    180
caagatgcgc atcatgggct tccggggcac ggtcatcaag ccgctgaacg aggaggcggc    240
```

```
agccgagctg ggcgcagagc tgctgggcga agccaccatc ttcatcgtgg gcggcggctg      300
cctagtgctg gagtactggc gccaccaggc gcagcagcgc cacaaggagg aggagcagcg      360
tgctgcctgg aacgcgctgc gggacgaggt gggccacctg gcgctggcgc tggaagcgct      420
gcaggcgcag gtgcaggcgg cgccgccaca gggcgccctg gaggaactgc gcacagaact      480
gcaagaggtg cgcgcccact c                                               501
```

```
<210> 182
<211> 501
<212> DNA
<213> Homo sapien
```

```
<400> 182
ccccagcaga catgtttgcc aaggcctttc gggtcaagtc caacacggcc atcaaggggt       60
cggacaggag aaagcttcga gctgatgtga caactgcttt ccccaccctt ggaactgatc      120
aagtctctga gttagtacct ggaaaggagg agctcaacat tgtgaagttg tatgctcaca      180
aaggggatgc agtgactgtg tacgtgagtg gtggtaaccc catcctcttt gaactggaga      240
aaaatctgta tccaacagtg tacacgctgt ggtcctatcc tgatcttctg ccaaccttta      300
caacatggcc tctggtgctc gagaaactgg tagggggagc agatttgatg ctgcctggac      360
tggtgatgcc ccctgctggt ctgcctcagg tacagaaggg cgacctctgt gccatttctt      420
tggtggggaa cagagcccct gtagccattg gagttgcagc catgtccaca gctgagatgc      480
tcacgtcagg cctgaaggga a                                               501
```

```
<210> 183
<211> 501
<212> DNA
<213> Homo sapien
```

```
<400> 183
atctgctcac tttagcactc tggcaattaa acagaacccc cttctggcag aagcttattc       60
gaatttgggg aatgtgtaca aggaaagagg gcagttgcag gaggcaattg agcattatcg      120
acatgcattg cgtctcaaac ctgatttcat cgatggttat attaacctgg cagccgcctt      180
ggtagcagcg ggtgacatgg aaggggcagt acaagcttac gtctctgctc ttcagtacaa      240
tcctgatttg tactgtgttc gcagtgacct ggggaacctg ctcaaagccc tgggtcgctt      300
ggaagaagcc aaggcatgtt atttgaaagc aattgagacg caaccgaact ttgcagtagc      360
ttggagtaat cttggctgtg ttttcaatgc acaaggggaa atttggcttg caattcatca      420
ctttgaaaag ctgtcaccct tgacccaaac tttctggatg cttatatcaa tttaggaaat      480
gtcttgaaag agcacgcatt t                                               501
```

```
<210> 184
<211> 501
<212> DNA
<213> Homo sapien
```

```
<400> 184
agttctccca ggagaaagcc atgttcagtt cgagcgccaa gatcgtgaag cccaatggcg       60
agaagccgga cgagttcgag tccggcatct cccaggctct tctggagctg gagatgaact      120
cggacctcaa ggctcagctc agggagctga atattacggc agctaaggaa attgaagttg      180
gtggtggtcg gaaagctatc ataatctttg ttcccgttcc tcaactgaaa tctttccaga      240
aaatccaagt ccggctagta cgcgaattgg agaaaaagtt cagtgggaag catgtcgtct      300
ttatcgctca gaggagaatt ctgcctaagc caactcgaaa aagccgtaca aaaaataagc      360
aaaagcgtcc caggagccgt actctgacag ctgtgcacga tgccatcctt gaggacttgg      420
tcttcccaag cgaaattgtg ggcaagagaa tccgcgtcaa actagatggc agccggctca      480
taaaggttca tttggacaaa g                                               501
```

```
<210> 185
<211> 460
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(460)
<223> n = A,T,C or G

<400> 185
gcacaaaatg gcggcggcgg cggcggcggc tggtgctgca gggtcggcag ctcccgcggc        60
agcggccggc gccccgggat ctggggggcgc accctcaggg tcgcaggggg tgctgatcgg       120
ggacaggctg tactccgggg tgctcatcac cttggagaac tgcctcctgc ctgacgacaa       180
gctccgtttc acgccgtcca tgtcgagcgg cctcgacacc gacacagaga ccgacctccg       240
cgtggtgggc tgcgagctca tccaggcggc cggtatcctg ctccgcctgc cgcaggtggc       300
catggctacc gggcaggtgt tgttccagcg gttctttttat accaagtcct tcgtgaagca       360
ctccatggag catgtgtcaa tggcctgtgt ccacctggct tccaagatag aagangcccc       420
aagaccatac gggacgtcat caatgtgttt caccgccttc                              460


<210> 186
<211> 401
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(401)
<223> n = A,T,C or G

<400> 186
cgtgttttgg gccggttctg gagtggctgg cggcggggcc tgggtgtccg cccagtgccc        60
gaggacgcag gctttggcac cgaagcccgg catcagaggc aaccccgcgg ctcctgccaa       120
cggtcggggc ccctcgggga ccagcccttc gcggggctgc tgccaaaaaa cctcagtcgg       180
gaggagctgg ttgatgcgct gcgggcagcc gtggtggacc ggaaaggacc tctagtgacg       240
ttgaacaagc cacagggtct accagtgaca ggaaaaccag gagagctgac gttgttctca       300
gtgctgccag agctgagcca gtccctangg ctcagggagc aggagcttca ggttgtccga       360
ncatctggga agtaagtggt angggtgaca ggaagctang a                           401


<210> 187
<211> 376
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(376)
<223> n = A,T,C or G

<400> 187
gcatccgccc tgtctgggag gtggggggcg cgcctctgnc cagccgccac gtctgggaag        60
tggggagccc cactgcccgg ctgccacccc gtctgggagg tgtacccaac agctcattga       120
gaacgggcca tgatgacgat ggcggttttg tcgaatagaa aaggggggaaa tgtggggaaa      180
agaaagagag atcagattgt tactgtgtct gtgtagaaag aagtagacat aggagactcc       240
```

```
attttgttct gtactaagaa aaattcttct tccttgggat gctgttaatc tataacctta    300
cccccaaccc cgtgctctct gaaacatatg ctgtgtcaac tcagggttaa atggattaag    360
ggcggtgcaa gatgtg                                                     376
```

<210> 188
<211> 376
<212> DNA
<213> Homo sapien

```
<400> 188
aacctggagc gcaccttcat cgccatcaag ccggacggcg tgcagcgcgg cctggtgggc     60
gagatcatca agcgcttcga gcagaaggga ttccgcctcg tggccatgaa gttcctccgg    120
gcctctgaag aacacctgaa gcagcactac attgacctga aagaccgacc attcttccct    180
gggctggtga agtacatgaa ctcagggccg gttgtggcca tggtctggga ggggctgaac    240
gtggtgaaga caggccgagt gatgcttggg gagaccaatc cagcagattc aaagccaggc    300
accattcgtg gggacttctg cattcaggtt ggcaggaaca tcattcatgg cagtgattca    360
gtaaaaagtg ctgaaa                                                     376
```

<210> 189
<211> 501
<212> DNA
<213> Homo sapien

```
<400> 189
cccctaccgc ggagcagcac catgtcggcg ccggcggcca aagtcagtaa aaaggagctc     60
aactccaacc acgacggggc cgacgagacc tcagaaaaag aacagcaaga agcgattgaa    120
cacattgatg aagtacaaaa tgaaatagac agacttaatg aacaagccag tgaggagatt    180
ttgaaagtag aacagaaata taacaaactc cgccaaccat tttttcagaa gaggtcagaa    240
ttgatcgcca aaatcccaaa tttttgggta acaacatttg tcaaccatcc acaagtgtct    300
gcactgcttg gggaggaaga tgaagaggca ctgcattatt tgaccagagt tgaagtgaca    360
gaatttgaag atattaaatc aggttacaga atagattttt attttgatga aaatccttac    420
tttgaaaata aagttctctc caaagaattt catctgaatg agagtggtga tccatcttcg    480
aagtccaccg aaatcaaatg g                                               501
```

<210> 190
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

```
<400> 190
aagttctgaa gattcatttt tgtctgccat tataaattat actaatagct ctacagtcca     60
ctttaagttg tcccctacat atgtattata tatggcatgc cggtatgtat tgtccaacca    120
gtacagacct gacatcagcc ctacagagcg cacacataaa gtcattgcag tcgtcaacaa    180
gatggtgagc atgatggagg gtgtcatcca gaaacagaag aatattgcag gggcacttgc    240
cttctggatg gcaaatgcat ctgaacttct caacttcatt aagcaagacc gagaccttag    300
tcggatcaca ctggatgctc aagatgtttt agcacatttg gttcaaatgg catttaaata    360
cttggttcac tgtcttcaat cagaacttaa taattacatg ccagcctttc tagatgaccc    420
tgaagagaac agtctgcaac gaccaaaaat agatgatgtg ctgcacacgc tcacaggagc    480
catgtncttg ctacgacgct g                                               501
```

```
<210> 191
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 191
ttgtgcgtgc tcagccacta cccttcttn gnccacttc cganagtgtt tgtatactct      60
caagcgcctg gnggactgct gtagtgagcg ccttctgggc aagaaactgg gcatccctcg    120
aggcgtacaa agggacacca tgtggcggat ctttactgga tcgctgctgg tagaggagaa    180
gtcaagtgcc cttctgcatg accttcgaga gattgaggcc tggatctatc gattgctgcg    240
ctccccagta cccgtctctg ggcagaagcg agtagacatc gaggtcctac cccaagagct    300
ccagccagct ctgacctttg ctcttccaga cccatctcga ttcaccctag tggatttccc    360
actgcacctt cccttggaac ttgtaggtgt ggacgcctgt ctccagntgc taacctgcat    420
tctggtagag cacaaggcgg cgctacagtc ccgagactac aatgcactct ccatgtctgt    480
gatggcatnc atggcaatga t                                             501

<210> 192
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 192
tttganttga accagaagct ccaggaagaa aaacataaaa gcataactga ggcacttagg      60
agacaggagc agaatataaa gagttttgag gagacctatg accgaaagct caagaatgaa    120
cttctaaact tccacaggct gcatggtgtc tgcctggctt tgggaatcct catatgactt    180
tggcaggtgt tggagtttgg aggctcttcg ccacaggagt gcttctattt ccttttggaa    240
ccaaaagggc agctggtaac agctgggaaa gggaagtgaa actgtgaaaa tgtgcctttt    300
ggtattgcta atccggatat aatgctcttg gcagttggct ctcaggactg tgcttagtcc    360
ctgagcacaa aagttcttac cttggttggg ggtgggcaga tggtacaggt ggattggaag    420
tgaccgtctg attatcattt gggattgagt ctgttgtgtg ctgtgtaaat ttaatttacc    480
cctttgctct ttgtgtcagt t                                             501

<210> 193
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 193
```

```
agnttctcgc tctcgcctgc ctgcccgctc ccttgcttgc tcgcgctttc gctcgccctc          60
tcctcgagga tcgaggggac tctgaccaca gcctgtggct gggaagggag acagaggcgg         120
cggcggctca ggggaaacga ggctgcagtg gtggtagtag gaagatgtcg ggcgaggacg         180
agcaacagga gcaaactatc gctgaggacc tggtcgtgac caagtataag atggggggcg         240
acatcgccaa cagggtactt cggtccttgg tggaagcatc tagctcaggt gtgtcggtac         300
tgagcctgtg tgagaaaggt gatgccatga ttatggaaga aacaggggaaa atcttcaaga        360
aagaaaagga aatgaagaaa ggtattgctt ttcccaccag catttcggta aataactgtg         420
tatgtcactt ctcccctttg aagagcgacc aggattatat tctcaaggaa ggtgacttgg         480
taaaaattga ccttggggtc c                                                    501
```

`<210> 194`
`<211> 560`
`<212> DNA`
`<213> Homo sapien`

`<220>`
`<221> misc_feature`
`<222> (1)...(560)`
`<223> n = A,T,C or G`

`<400> 194`
```
ggcttcactc tcacaaactc cttgaatttc ttctctttat tcttttcctt gtcttttgta          60
gttggggaac tggcanagac ccgcttcctg gtcaggtct cctggctggg cttgtctgaa          120
gctgaagggc ccctggtttg gacatgcctc tttcccgggc tctcttctgg ctccagtgac         180
ttctccattc catggaaata cttcatgtga tagtgcaaca gtttggcttt gcggaaaaat         240
tttaaacagt ccacaacttt gcatctaaac ttatggtcta ggtcgacagc tggtgcatta         300
natgacccaa aatcatctgt tttcttaaaa gtatttgtta cttccacagt cgaaatctct         360
tgtaattcca caagggggaga agtcggttct gttttcatcg tgtttctcc cattgatggg        420
cagttcaact ccaagcctgc agccccggat ccatccccaa aggagnggca agtcagtgca         480
natganacct ggccagcttc caaagcagac ttcaactgac cttcttcaga ttccttggta         540
ctanacaacg tgtcttgcaa                                                     560
```

`<210> 195`
`<211> 582`
`<212> DNA`
`<213> Homo sapien`

`<400> 195`
```
ggcacctggg gagaaatgga tggagaaggg acctggctgg aaagcctttg ccccgctgct          60
ctgctccgcc cataagagga cccctgaaat gtcccgtgca gtttgttcaa gtcccctgtg         120
tgatgaaatg tgcctctcgc cttacccgtg tgagaatacc tgtggtgtgg cagcgagtat         180
tttggtattt gacctgtcca aagacgactt gatacctcta taatgtaaca gaaaaggtca         240
gaaaatatta agcaagtaga agtgtggagc atattaagca agatgaacat ctcgggaagc         300
agctgtggaa gccctaactc tgcagataca tctagtgact ttaaggacct ttggacaaaa         360
ctaaaagaat gtcatgatag agaagtacaa ggtttacaag taaaagtaac caagctaaaa         420
caggaacgaa tcttagatgc acaaagacta gaagaattct tcaccaaaaa tcaacagctg         480
agggaacagc agaaagtcct tcatgaaacc attaaagttt tagaagatcg gttaagagca         540
ggcttatgtg atcgctgtgc agtaactgaa gaacatatgc gg                            582
```

`<210> 196`
`<211> 401`
`<212> DNA`
`<213> Homo sapien`

```
<220>
<221> misc_feature
<222> (1)...(401)
<223> n = A,T,C or G

<400> 196
aaaccaaaga atggattgaa gagaagaatc aagctctaaa cacagacaat tatggacatg      60
atctcgccag tgtccaggcc ctgcaacgca agcatgaggg cttcgagagg gaccttgcgg     120
ctctcggtga caaggtaaac tcccttggtg aaacagcaga gcgcctgatc cagtcccatc     180
ccgagtcagc agaagacctg caggaaaagt gcacagagtt aaaccaggcc tggagcagcc     240
tggggaaacg tgcagatcag cgcaaggcaa agttgggtga ctcccacgac ctgcagcgct     300
tccttagcga tttccgggac ctcatgtctt ggatcaatgg aatacggggg ttggtgtcct     360
cagatgagct anccaaggat gtcaccggag ctgangcatt g                         401


<210> 197
<211> 457
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(457)
<223> n = A,T,C or G

<400> 197
agtttcccgg accatggcca acctggagcg caccttcatn gccatcaagc cggacggngt      60
gcancgcggc ctggtgggcg agatcatcaa gcgcttngan cagaagggat tccgcctcnt     120
ggccatgaan ttcctccggg cctctgaana acacctgaag cagcactaca ttgacctgaa     180
agaccgacca ttcttccctg ggctggtgaa ntacatgaac tcagggccgg ttgtggccat     240
ggtctgggag gggctgaacg tggtgaagac aggccgagtg atgcttgggg agaccaatcc     300
agnagattca aagccaggca ccattcntgg ggacttctgc attcaggttg gnangaacat     360
nattcatggn agtgattcan taaaaagtgc tgaaaaanaa atcancctat ggnttaagcc     420
tgaagaactg gttgactaca agtcttgngc tcatgac                              457


<210> 198
<211> 474
<212> DNA
<213> Homo sapien

<400> 198
aggctgaacc cgaggagatg aacccttaa ctaaggtgaa gctgatcaac gagctgaatg       60
aacgagaggt ccagcttggg gtggccgata aggtgtcctg gcactccgag tacaaggaca     120
gcgcctggat cttcctggga gggcttcctt atgaactgac tgaagggac atcatctgtg      180
tgttctcaca atatggggag attgttaaca ttaatctcgt gcgggacaag aaaactggga     240
aatccaaagg attctgtttc ctctgctatg aagaccagag gagcacaatt ctggccgtcg     300
acaattttaa tgggatcaag atcaaaggaa gaactatccg agtggatcat gtgtctaact     360
atcgggctcc taaggactca gaagaaatag atgatgtgac cagacaactc caggagaagg     420
gctgtgggc tcgtacccccc tcaccaagtt tgtctgagag ctctgaagat gaaa           474


<210> 199
<211> 574
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(574)
<223> n = A,T,C or G

<400> 199
gagaagaaac aggaagaaga agaaacgatg cagcaagcga catgggtaaa atacacattt      60
ccagttaagc atcaggtttg gaaacaaaaa ggtgaagagt acagagtgac aggatatggt     120
ggttggagct ggattagtaa aactcatgtt tataggtttg ttcctaaatt gccaggcaat     180
actaatgtga attacagaaa gtcgttagaa ggaaatgtga aggagctctt agattctgac     240
agtgataaac cctgcaagga agaaccaatg gaagtagacg atgacatgaa aacagagtca     300
catgtaaatt gtcaggagag ttctcaagta gatgtggtca atgttagtga gggttttcat     360
ctaaggacta gttacaaaaa gaaaacaaaa tcatccaaac tagatggact tcttgaaagg     420
agaattaaac agtttacact ggaagaaaaa cagcgactcg aaaaaatcaa gttggagggt     480
ggaattaagg gtataaggaa agacttctac aaattcttca aaaaatctct ctgaatcacc     540
agtaataacc gaaagcaaaa gaanggtgtc agag                                 574


<210> 200
<211> 522
<212> DNA
<213> Homo sapien

<400> 200
tccataacct tatggagaga aaggactttg agacatggct tgataacatt tctgttacat      60
ttctttctct gacggacttg cagaaaaatg aaactctgga tcacctgatt agtctgagtg     120
gggcagtcca gctcaggcat ctctccaata acctagagac tctcctcaag cgggacttcc     180
tcaaactcct tcccctggag ctcagttttt atttgttaaa atggctcgat cctcagactt     240
tactcacatg ctgcctcgtc tctaaacagt ggaataaggt gataagtgcc tgtacagagg     300
tgtggcagac tgcatgtaaa aatttgggct ggcagataga tgattctgtt caggacgctt     360
tgcactggaa gaaggtttat ttgaaggcta ttttgagaat gaagcaactg gaggaccatg     420
aagcctttga aacctcgtca ttaattggac acagtgccag agtgtatgca ctttactaca     480
aagatggact tctctgtaca gggtcagatg acttgctgca aa                        522


<210> 201
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 201
atctccgcct ggttcggccc gcctgcctcc actcctgcct ctaccatgtc catcagggtg      60
acccagaagt cctacaaggt gtccacctct ggcccccggg ccttcagcag ccgctcctac     120
acgagtgggc ccggttcccg catcagctcc tcgagcttct cccgagtggg cagcagcaac     180
tttcgcggtg gcctgggcgg cggctatggt ggggccagcg gcatgggagg catcaccgca     240
gttacggtca accagagcct gctgagcccc cttgtcctgg aggtggaccc caacatccag     300
gccgtgcgca cccaggagaa ggagcagatc aagaccctca caacaagtt tgcctccttc      360
atagacaagg tacggttcct ggagcancag aacaagatgc tggagaccaa gtggagcctt     420
cttgcagcag cagaagacgg ctcgaagcaa catggacaac atgttcnaaa gctacatcaa     480
caaccttagg cgnagcttga a                                               501
```

```
<210> 202
<211> 501
<212> DNA
<213> Homo sapien

<400> 202
gcgttctgtg gagagagtgc gaggtcaggc catgaacttg ggagatggtt taaagcttga      60
aactaaatta ctggatggaa aaaccaagct aatattgtct ccatatgaac ataaatcaaa     120
aatttctgtg aagatgggaa ataaggccaa gattgcaaaa tgtcctttaa gaacaaaaac     180
tgggcacatt ctaaaatcaa cacaagatac ttgtattggg agtgaaaaac ttttgcaaaa     240
gaagccagtt ggttcagaaa catcacaggc aaaaggtgaa aaaaatggaa tgacttttttc    300
atccactaag gatttatgta aacaatgtat agataaagac tgtcttcata tccagaaaga     360
gatttcacct gcaactccta atatgcagaa gactagaaac accgtaaata catctctagt     420
aggtaaacag aagcctcaca aaaaacacat cacagctgaa aacatgaaga gcagtttggt     480
gtgtctaaca caagaccaac t                                                501


<210> 203
<211> 395
<212> DNA
<213> Homo sapien

<400> 203
cttcatcatt gcagactcct tcctacatca tgcgtatcgt tttcattata cactttgtgc      60
cactttgctg ctagccttca agggattgca cagctacttc attacagtaa cagaagagat     120
tccttcttgt cagaaactag aactggccaa ggccaacatg cagctcctat atgagcgtct     180
tctcagaaga aaacagctac gaacacagaa agacaaccat ctagaggaaa tggatgtaga     240
agctcgactt actgaactat gtgaagaagt taagaaaata gagaatcctg atgaactggc     300
agaacttata aatatgaatc ttgcgcaact ttgctcactt ttgatggctt tatggggaca     360
gtttctggaa gttataacgc tacacgaaga actaa                                 395


<210> 204
<211> 501
<212> DNA
<213> Homo sapien

<400> 204
aggtcaggca gaaattggag aggggggctca aaagctgctg cggcccaaca gcttgagact      60
ggcaagtgac tcagatgcag agtcagactc tcgggcaagc tctcccaact ccaccgtctc     120
caacaccagc accgagggct tcggggggcat catgtctttt gccagcagcc tctatcggaa     180
ccacagtacc agcttcagtc tttcaaacct cacactgccc accaaaggtg cccgagagaa     240
ggccacgccc ttccccagtc tgaaaggaaa caggagggcg ttagtggatc agaagtcatc     300
tgtcattaaa cacagcccaa cagtgaaaag agaacctcca tcaccccagg gtcgatccag     360
caattctagt gagaaccagc agttcctgaa ggaggtggtg cacagcgtgc tggacggcca     420
gggagttggc tggctcaaca tgaaaaaggt gcgccggctg ctggagagcg agcagctgcg     480
agtctttgtc ctgagcaagc t                                                501


<210> 205
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
```

<223> n = A,T,C or G

<400> 205
cagaagtgca gcggtggcgg cggctggttg cgggccggcg gcgggctggc ggagatggag   60
gatcttgttc aagatggggt ggcttcacca gctacccctg ggaccgggaa atctaagaat   120
tggagaaaga aattgaagaa ctcagatcaa aacctgttac tgaaggaact ggtgatatta   180
ttaaggcatt aactgaacgt ctggatgctc ttcttctgga aaaagcagag actgagcaac   240
agtgtctttc tctgaaaaag gaaaatataa aaatgaagca agaggttgag gattctgtaa   300
caaagatggg agatgcacat aaggagttgg aacaatcaca tataaactat gtgaaagaaa   360
ttgaaaattt gaaaaatgag ttgatggcag tacgttccaa atacagtgaa gacaaagcta   420
acttacaaaa ncagctggaa naagcaatga atacncaatt agaactttca naacaactta   480
aatttcanaa caactctgaa g   501

<210> 206
<211> 599
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(599)
<223> n = A,T,C or G

<400> 206
tggtcgcacc agctctctgc tctcccagcg cagcgccgcc gcccggcccc tccagcttcc   60
cggaccatgg ccaacctgga gcgcaccttc atcgccatca agccggacgg cgtgcagcgc   120
ggcctggtgg gcgagatcat caagcgcttc gagcagaagg gattccgcct cgtggccatg   180
aagttcctcc gggcctctga agaacacctg aagcagcact acattgacct gaaagaccga   240
ccattcttcc ctgggctggt gaagtacatg aactcagggc cggttgtggc catggtctgg   300
gaggggctga acgtggtgaa gacaggccga gtgatgcttg gggagaccaa tccagcagat   360
tcaaagccag gcaccattcg tggggacttc tgcattcagg ttggcaggaa catcattcat   420
ggcagtgatt cagtaaaaag tgctgaaaaa gaaatcagcc tatggtttaa gcctgaagaa   480
ctggttgact acaagtcttg tgctcatgac tgggtctatg aataagaggt ggacacaaca   540
gcagtctcct tcacacggcg tggtgtgtcc tggacacagt nttattcttg acttaaagc   599

<210> 207
<211> 395
<212> DNA
<213> Homo sapien

<400> 207
ccggccgggc cgagggtcgg cggccgccgg cgggccgggc ccgcgcacag cgcccgcatg   60
tacaacatga tggagacgga gctgaagccg ccgggccccgc agcaaacttc ggggggcggc   120
ggcggcaact ccaccgcggc ggcggccggc ggcaaccaga aaaacagccc ggaccgcgtc   180
aagcggccca tgaatgcctt catggtgtgg tcccgcgggc agcggcgcaa gatggcccag   240
gagaacccca agatgcacaa ctcggagatc agcaagcgcc tgggcgccga gtggaaactt   300
ttgtcggaga cggagaagcg gccgttcatc gacgaggcta agcggctgcg agcgctgcac   360
atgaaggagc acccggatta taaataccgg ccccg   395

<210> 208
<211> 398
<212> DNA
<213> Homo sapien

<400> 208
aggctctcca agccctgctg ttatattttt ccaggaggga ggggcgattc tgccttgttt   60
gcagtgaatg gtttcaatat gctcatcaat ggcggatcag agagaaaatc ctgcttctgg   120
aagctcatcc gacacttaga ccgagtggac tccatcctgc tcacccacat tggggatgac   180
aatttgcctg gaataaacag catgttacag cggaaaattg cagagctcga ggaagaacag   240
tcccagggct ccaccacaaa tagtgactgg atgaaaaacc tcatctcccc tgacttagga   300
gttgtatttc tcaatgtacc tgaaaatctc aaaaatccag agccaaacat caagatgaag   360
agaagcatag aagaagcctg cttcactctc cagtacct   398

<210> 209
<211> 501
<212> DNA
<213> Homo sapien

<400> 209
gcgcagcctc ctgggagttg tagtcgcgat cctgaggtaa cggataagtt tataccatgg   60
atagcacaaa ggagaagtgt gacagttaca aagatgatct tctgcttagg atgggactta   120
atgataataa agcaggaatg gaaggattag ataaagagaa aattaacaaa attataatgg   180
aagccacgaa ggggtccaga ttttatggaa atgagctcaa gaaagaaaag caagtcaacc   240
aacgaattga aaatatgatg caacaaaaag ctcaaatcac cagccaacag ctaagaaaag   300
cacaattaca ggttgacaga tttgcaatgg aattagaaca aagccgaaat ttgagcaata   360
ccatagtgca cattgacatg gatgctttct atgcagctgt agaaatgagg gacaatccag   420
aattgaagga taaacccatt gctgtaggat caatgagtat gctgtctact tcaaattacc   480
atgcaaggag atttggtgtt c   501

<210> 210
<211> 450
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(450)
<223> n = A,T,C or G

<400> 210
cggaacaagt gcagaacagg ataatcggtt cagcaacaaa cagaagaaac tactgaagca   60
gctgaaattt gcagaatgcc tagaaaaaaa ggtggacatg agcaaagtaa atttggaggt   120
tataaagcct tggataacaa aaagagtaac ggaaatcctt gggtttgaag atgatgttgt   180
gattgagttt atattcaacc agctggaagt gaagaatcca gactccaaaa tgatgcaaat   240
caacctgact ggatttttga atggaaaaaa tgctcgagaa tttatgggag aactgtggcc   300
cctgctgcta agtgcacaag aaaacatcgc gggaatccct tctgctttcc tagaactgaa   360
gaaagaagaa ataaacaaa gacagattga acaagaaaaa ctggcatcta tgaaaaagcn   420
agatgaagac caagattaaa gagaaangga   450

<210> 211
<211> 601
<212> DNA
<213> Homo sapien

<400> 211
ctcagagcag ctggaacagg ccaagcggtt caaagcaaat ctagagaaga acaagcaggg   60
cctggagaca gataacaagg agctggcgtg tgaggtgaag gtcctgcagc aggtcaaggc   120
tgagtctgag cacaagagga agaagctcga cgcgcaggtc caggagctcc atgccaaggt   180

```
ctctgaaggc gacaggctca gggtggagct ggcggagaaa gcaagtaagc tgcagaatga        240
gctagataat gtctccaccc ttctggaaga agcagagaag aagggtatta aatttgctaa        300
ggatgcagct agtcttgagt ctcaactaca ggatacacag gagcttcttc aggaggagac        360
acgccagaaa ctaaacctga gcagtcggat ccggcagctg gaagaggaga agaacagtct        420
tcaggagcag caggaggagg aggaggaggc caggaagaac ctggagaagc aagtgctggc        480
cctgcagtcc cagttggctg ataccaagaa gaaagtagat gacgacctgg gaacaattga        540
aagtcttgga agaagccaag aagaacttct gaaggacgcg gaggccctga gccaacgcct        600
g                                                                         601


<210> 212
<211> 498
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(498)
<223> n = A,T,C or G

<400> 212
atgacaaata ttccacatct gtgattctct ccagtcaaaa gttctttgag acgatgccat         60
cggccttggc caatcggaga atggaatcat ctgactcacc catcctacga atggccccgc        120
agatagcata agttttaaac tggccattaa acctgcctgt gaccttgtca acctcggcca        180
cgttcatctg gatggatgcg tggtccttgg caccgatgat gcgattgcta gcggagcatt        240
tccgcggcac gtacaggtcc acgaactcgc cggcgtcgtt ctgcatttcg aggctgggct        300
gcgcctgctg ccactcgtgc cgaattcttt ggatccacta gtgtcgacct gcaggcgcgc        360
gagctccagc ttttgtccct ttagtgaggg ttaatttcga gcttggcgta atcaanggca        420
tagctggttc ctgngngaaa ttggtatccg tcacaattcc ncncaatata cgagccggaa        480
gtataaaggg naaagcct                                                       498


<210> 213
<211> 601
<212> DNA
<213> Homo sapien

<400> 213
actaccagac aaccttagcc aaaccattta cccaaataaa gtataggcga tagaaattga         60
aacctggcgc aatagatata gtaccgcaag ggaaagatga aaaattataa ccaagcataa        120
tatagcaagg actaaccect ataccttctg cataatgaat taactagaaa taactttgca        180
aggagagcca aagctaagac ccccgaaacc agacgagcta cctaagaaca gctaaaagag        240
cacacccgtc tatgtagcaa aatagtggga agatttatag gtagaggcga caaacctacc        300
gagcctggtg atagctggtt gtccaagata gaatcttagt tcaactttaa atttgcccac        360
agaaccctct aaatcccctt gtaaatttaa ctgttagtcc aaagaggaac agctctttgg        420
acactaggaa aaaaccttgt agagagagta aaaaatttaa cacccatagt aggcctaaaa        480
gcagccacca attaagaaag cgttcaagct caacacccac tacctaaaaa atcccaaaca        540
tatactgaac tcctcaaccc aattggccaa tctatcccct atagaagact aatggtagta        600
t                                                                         601


<210> 214
<211> 500
<212> DNA
<213> Homo sapien

<220>
```

<221> misc_feature
<222> (1)...(500)
<223> n = A,T,C or G

<400> 214
aggctgcatt tacggggtct cccggagggc cagagtcgtg gcttacagaa gagacgaaat   60
gtggtctgag ggacgatatg aatatgaaag aattccgaga gaacgagcac ctcctcgaag   120
tcatcccagt gatgaatctg gttatagatg gacaagagac gatcattctg caagcaggca   180
acctgaatac agggacatga gagatggctt tagaagaaaa agtttctact cttcccatta   240
tgcgagagag cggtctcctt ataaaaggga caatactttt ttcagagaat cacctgttgg   300
ccgaaaggat tctccacaca gcanatctgg ttccagtgtc agtagcanaa gctctctcca   360
gaaaggagca aatcatactc tttccatcag tctcaacata gaaataaaga gaggcctgtc   420
agtctttgaa aacatcaaga gatacttccc ctcaagtggt tcacagttct tctcaaaggg   480
gtagacaaac ccagtaggta   500

<210> 215
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 215
gcctgtggga gcccgtggcc tttaaagtgc cgttcagcct tttcctccag gggtgctttg   60
taaacacggc tgtgctcagg gctcgcgggt gaccgaaagg atcatgaact agtgacctgg   120
aaagggtact agatggaaac ttgagaaagg actgcttatt gataacagct aaggtattcc   180
tggaagcaga gtaaataaag ctcatggccc accagctaga aagtattctt gccatgagaa   240
aaagaatgtg ataagttatt caacttatga aattcaagtt acatgtgaat tctgccaggc   300
aatacaagga cctgtggaat atgagtgatg acaaaccctt tctatgtact gcgcctggat   360
gtggccagcg ttttaccaac gaggatcatt tggctgtcca taaacataaa catgagatga   420
cactgaaatt tggtccanca cgtaatgaca gtgtcattgt ggctgatcag accccaacac   480
caacaagatt cttgaaaaac t   501

<210> 216
<211> 501
<212> DNA
<213> Homo sapien

<400> 216
aggcggcctt gggggcatct gcattggagt tgggggtgcc gatgctgtgg atgtcatggc   60
tgggatcccc tgggagttga agtgccccaa ggtgattggc gtgaagctga cgggctctct   120
ctccggttgg tcctcaccca aagatgtgat cctgaaggtg gcaggcatcc tcacggtgaa   180
aggtggcaca ggtgcaatcg tggaatacca cgggcctggt gtagactcca tctcctgcac   240
tggcatggcg acaatctgca acatgggtgc agaaattggg gccaccactt ccgtgttccc   300
ttacaaccac aggatgaaga agtacctgag caagaccggc cgggaagaca ttgccaatct   360
agctgatgaa ttcaaggatc acttggtgcc tgaccctggc tgccattatg accaactaat   420
tgaaattaac ctcagtgagc tgaagccaca catcaatggg cccttcaccc ctgacctgct   480
cacctgtgg cagaagtggg c   501

<210> 217
<211> 408

<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(408)
<223> n = A,T,C or G

<400> 217
gctacacctg gacgtgacgt ggggctggga gcactggggc gggatcctgc cacagtcgct   60
ggacctgttg ctctgcatca acatggccca tgtcagcccc ctgcgctgca cggaggaacc   120
cagaatgggg gcttcgggac acagccctcc tggaggacct gggaaaggcc agtggcctgc   180
tcctggagag gatggtggac atgccagcca acaacaaatg cctgatcttc cggaaaaact   240
aagcccctcc ttcaccccccg cacacctgca tccctgccgg angctctgtg aggcacgaac   300
cctgcctccc taggccggac cttgtggacg acagccccac ccagtctgtg ctctcagccg   360
ntggccgaag ggcccancct gctcagaata aacatgtcct gctgccgg   408

<210> 218
<211> 402
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(402)
<223> n = A,T,C or G

<400> 218
tgcttgtctc aaagattaag ccatgcatgt ctaagtacgc acggccggta tcctgctccg   60
cctgccgcag gnggccatgg ntaccgggca ggngttgttc cagcggttct tttataccaa   120
gtccttcgtg aagcactcca tggagcatgt gtcaatggcc tgtgtccacc tggctttcaa   180
gatagaagag gccccaagac gcatacggga cgtcatcaat gtgtttcacc cgccttcgac   240
agctgagaga caaaaagaag cccgtgcctc tactactgga tcaagattat gttaatttaa   300
agaacccaat tataaaggcg ggnaagacna ttcttcaaaa agatggggntt ctgcgnccat   360
gtgaagcatn ctcataagan aatcgntatg taccttcagg gg   402

<210> 219
<211> 486
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(486)
<223> n = A,T,C or G

<400> 219
aatgctgcgg agattgaggt gtcggttcgt gctgctgagc tgcccaggct tcacggagcg   60
gtgttggaaa tcaatagctc ttctagcctt tgcattgttt aaatataata gtgtcattgg   120
actaagatgt tcctgatgcc aacctcttca gagttaaaca gtgggcagaa cttcctaacc   180
cagtggatga ccaatccttc tcgggctggg gtcatattaa atcgtggatt tcctattttg   240
gaagcagaca aagagaagcg agcagcttgt ggacatttct accagctttt nctattaaaa   300
ggcacacatt tttctgatag cttcagcttt tataaatgaa gaaaaattca cttcttgaag   360
aacagaagtt ggagtcaaac aacacttaca aaccacagtc agataaatct gaaacccata   420

```
cagcctttcc ttgcattaaa aagggaccnc aggtngcggn atggtccagt gctcctggac      480
ncccgg                                                                 486
```

<210> 220
<211> 380
<212> DNA
<213> Homo sapien

<400> 220
```
ggcggattag ccttcgcggg gcaaaatgga gctcgaggcc atgagcagat ataccagccc       60
agtgaaccca gctgtcttcc cccatctgac cgtggtgctt ttggccattg gcatgttctt      120
caccgcctgg ttcttcgttt acgaggtcac ctctaccaag tacactcgtg atatctataa      180
agagctcctc atctccttag tggcctcact cttcatgggc tttggagtcc tcttcctgct      240
gctctgggtt ggcatctacg tgtgagcacc caagggtaac aaccagatgg cttcactgaa      300
acctgctttt gtaaattact ttttttttact gttgctggaa gtgtcccacc tgctgctcat      360
aataaatgca gatgtatagc                                                  380
```

<210> 221
<211> 406
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(406)
<223> n = A,T,C or G

<400> 221
```
gcggattagc cttcgcgggg caaaatggag ctcgaggcca tgagcagata taccagccca       60
gtgaacccag ctgtcttccc ccatctgacc gtggtgcttt tggccattgg catgttcttc      120
accgcctggt tcttcgttta cgangtcacc tctaccaagt acactcgtga tatctataaa      180
gagctcctca tctccttagt ggcctcactc ttcatgggct ttggagtcct cttcctgctg      240
ctctgggttg gcatctacgt gtgagcaccc aagggtaaca accagatggc ttcactgaaa      300
cctgcttttg taaattactt ttttttactg ttgctggaag tgtcccacct gctgctcata      360
ataaatgcag atgtatagcc ctatagngag cgtattacaa ttcact                    406
```

<210> 222
<211> 501
<212> DNA
<213> Homo sapien

<400> 222
```
aatggcggta gttggtgtgt cctcggtttc tcggctgctg ggtcggtccc gcccacagct       60
ggggcggcct atgtcgagtg gcgcccatgg cgaagagggc tcagctcgca tgtggaagac      120
tctcaccttc ttcgtcgcgc tccccggggt ggcagtcagc atgctgaatg tgtacctgaa      180
gtcgcaccac ggagagcacg agagacccga gttcatcgcc tacccccatc tccgcatcag      240
gaccaagccg tttccctggg gagatggtaa ccatactcta ttccataacc ctcatgtgaa      300
tccacttcca actggctacg aagatgaata aagagaatct ggaccactac ccgggcacca      360
gggaccacag cactggtttg gaccgttact ctgcacatgg accagaaaaa gtatatggga      420
ccttaagctc accttcttta cttgtatcaa atgatgactg gtatactggt ctcccatccc      480
tttgcttgtg gcaggagatg g                                               501
```

<210> 223
<211> 455
```

```
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(455)
<223> n = A,T,C or G

<400> 223
aatcttatgc aaaagggaca caggggttca aaaataaaaa tttctcttcc ccctccccaa     60
acctgtaccc cagctccccg accacaaccc ccttcctccc ccggggaaag caagaaggag    120
caggtgtggc atctgcagct gggaananag aggccgggga ggtgccgagc tcggtgctgg    180
tctctttcca aatataaata cgtgtgtcan aactggaaaa tcctccagca cccaccaccc    240
aagcactctc cgttttctgc cggtgtttgg agaggggcgg ggggcagggg cgccaggcac    300
cggctggctg cggtctactg catccgctgg gtgtgcaccc cgcgagcctc ctgctgctca    360
ttgtagaaga gatgacactc ggggtccccc ccggatgggn ggggctccct ggatcagctt    420
tccggnggnt ggggttcaca caccagcact tccca                               455


<210> 224
<211> 507
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(507)
<223> n = A,T,C or G

<400> 224
ttacccacac ccattgtagc ccttgggtgn gggatgtgcc ctgtccctgc agggccaaaa     60
gggtccatgt ttccctcaaa tctcaaagca gtcctggccc aggctgcagg caggagggaa    120
gtcgtgacct cttggcaggc tcagtcctgc agctgcccca agcagccana ctgtccctgg    180
ggctcgtcca ggcccgggcg ctggctggga ggggaggtgt ctggcaggtc ttggcatgga    240
ggaaaanagc tgctgcaggg cctntcgggg gaggggttgg ccaagtaggc attcaccagc    300
tgcatgatct cttccacctg ggggctctgc aggaggagct ggntctctcc caccctcaag    360
gccagggtgn ggggccccat tagctggcag gcggccacat ggccatagct gacactgngg    420
atgggctccg tctcccctgg ccggganagg gacatggcct tggctcccaa gcccaggcac    480
agtttntggg ggagcacccc gaccagg                                        507


<210> 225
<211> 572
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(572)
<223> n = A,T,C or G

<400> 225
aaacctccct taaagattct ttgatgcttt gctctatcac tgtanacctg gtctttttcc     60
ccccagtttt ttcttttttta cattctgggt tgctattttc anattaataa tttgatgacc    120
ccatcacagt accaaaatac cccccaaaat gaagttcaaa tttgatcaaa acataaatca    180
gagngagnga gtaaaattat aaaggccagg cagcaggaaa agtcaccctc aactaccatn    240
```

```
tgactggtca ggtctcaccc atgccaaggg gggcaggaag agganaaatc tattatacat       300
gcaacactga actggggaac atggcttggg gcctccagga cagttcaggt ccccaagcta       360
accccctact tcccanacag ctgctcgtac agtttgggca catagtcatc ccactcggcc       420
tggtaacacg tgccagccac cggggccctg agctcatact ttttacggaa ggacgccacc       480
ttgaatttgc cacggnggnc tccanancgg ttgctgaaga tgggctcntc acactttagc       540
gggctgtcct gctcgtaaac canccaaaca ta                                     572


<210> 226
<211> 401
<212> DNA
<213> Homo sapien

<400> 226
gaagcgtctc cgttgggtcc ggccgctctg cgggactctg aggaaaagct cgcaccaggt        60
ggacgcggat ctgtcaacat gggtaaagga gaccccaaca agccgcgggg caaaatgtcc       120
tcgtacgcct tcttcgtgca gacctgccgg gaagagcaca agaagaaaca cccggactct       180
tccgtcaatt tcgcggaatt ctccaagaag tgttcggaga gatggaagac catgtctgca       240
aaggagaagt cgaagtttga agatatggca aaaagtgaca agctcgcta tgacagggag        300
atgaaaaatt acgttcctcc caaaggtgat aagaagggga agaaaaagga ccccaatgct       360
cctaaaaggc caccatctgc cttcttctgt tttgctctga a                          401


<210> 227
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 227
agcgcttcta gaaatgctga gccgattatc aggattagca aatgttgttt tgcatgaatt        60
atcaggagat gatgacactg atcagaatat gagggctccc ctagaccctg aattacacca       120
agaatctgac atggaattta ataatactac acaagaagat gttcaggagc gcctggctta       180
tgcagagcaa ttggtggtgg agctaaaaga tattattaga cagaaggatg ttcaactgca       240
gcagaaagat gaagctctac aggaagagag aaaaagctgt gatacaaaat aaaaaaacta       300
aacttctgcg aaggccaatt acttctttga taatantaga gaaatgaagc acaggaggac       360
tgttgctcag acctcagcag agacacttcc agctgcagag tctcagagag agtggaatga       420
aagataacat antcagagag gagactatca ncttgagcca ntctcagcca gagacacctg       480
acagaatggg tgtgaaggag c                                                 501


<210> 228
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 228
gcaggttccc ttttatgggc caggtggtaa ctggaacaca gaacagtgaa ggacagaacc        60
```

```
ttggaccaca ggccattcct caggatggca gtataacaca tcagatttct aggcctaatc  120
ctccaaattt tggtccaggc tttgtcaatg attcacagcg taagcagtat gaagagtggc  180
tccaggagac ccaacagctg cttcaaatgc agcagaagta tcttgaagaa caaattggtg  240
ctcacagaaa atctaagaag gccctttcag ctaaacaacg tactgccaag aaagctgggc  300
gtgaatttcc agaggaagat gcagaacaac tcaagcatgt tactgaacag caaagcatgg  360
ttcagaaaca gctagaacag attcgtaaac aacagaaaga acatgctgaa ttgattgaag  420
attatcggat caaacagcag cancaatgng caatggcccc acctaccatg atgcccagng  480
tccagccccca nccccctaa t                                            501
```


<210> 229
<211> 4099
<212> DNA
<213> Homo sapiens

<400> 229
```
cagctgccag ccgaggaggc gcggcggaga ggggactgcg gtcagctgcg tccacttggg 60
gctgtgcggc ggtcccgcgc ccggcgatgt tcccgggcac tccctgagta gcggcagctt 120
atccccgcc cgctagcccg ccctggtccc cggctcgctc gctggctggc gcggccccgg 180
ccccgctctg cgtcggcccc gccgcggtgg aggcgcgcga gggggacgcg gccggggatg 240
agcggattgc gggtgaactc gccgcccggg ggccccgcga agccgtgagc cgctgctttt 300
ctccgagtcg ccgccctgcc cttggatttg agatcatgtc catccacatc gtggcgctgg 360
ggaacgaggg ggacacattc caccaggaca accggccgtc ggggcttatc cgcacttacc 420
tggggagaag ccctctggtc tccggggacg agagcagctt gttgctgaac gcggccagca 480
cggtcgcgcg tccggtgttc accgagtatc aggccagtgc gtttgggaat gtcaagctgg 540
tggtccacga ctgtcccgtc tgggacatat ttgacagtga ttggtacact tctcgaaatc 600
taattggggg cgctgacatc attgtgatca aatacaacgt taatgacaag ttttcattcc 660
atgaagtaaa ggataattat attccagtga taaaaagagc attaaattca gttccagtaa 720
ttattgctgc tgttggtacc agacaaaatg aagagttacc ttgtacatgc ccactatgta 780
cctcagacag agggagctgt gttagtacaa ctgaagggat ccaacttgca aaagaactag 840
gagcaaccta tcttgaactc cacagccttg atgacttcta cataggaaag tattttggag 900
gagtgttgga gtatttttatg attcaagcct taaatcagaa gacaagtgaa aaaatgaaga 960
aaagaaaaat gagcaactcc tttcatggaa ttagaccacc tcaacttgaa caaccagaaa 1020
aaatgcctgt cttaaaggct gaagcgtcac attataactc tgacttaaat aacttgctgt 1080
tctgctgcca gtgtgtggac gtggtatttt ataaccccga tttaaagaaa gttgtagagg 1140
cccacaagat cgttctctgc gctgtaagcc atgttttcat gctgcttttc aatgtgaaga 1200
gtcccactga cattcaggat tccagtatca tccgaactac ccaggatctt tttgctataa 1260
acagagatac tgcatttcca ggtgctagcc atgaatcttc aggcaaccca ccattacgag 1320
tcattgttaa agacgccctc ttctgttctt gtttatcaga catccttcgc ttcatttatt 1380
caggtgcttt tcagtgggaa gaattggaag aagatatcag gaagaagttg aaagattctg 1440
gggatgtttc aaatgtaatc gagaaagtta aatgcatttt aaaaacacca ggaaagatta 1500
attgcctaag gaattgcaaa acctatcaag ccagaaaacc tttgtggttt tataacactt 1560
ccctcaagtt tttccttaat aagccgatgc ttgccgatgt tgtcttcgaa attcaaggta 1620
cgacagtgcc agcccacagg gccatcctgg tggcccgttg tgaagtgatg gcagccatgt 1680
ttaatggtaa ttacatggaa gcaaagagtg tcctgattcc cgtttatggt gttttccaaag 1740
agactttctt gtcattttta gaatacctgt acacagactc ctgctgccca gctggcatat 1800
tccaggccat gtgtctcctg atctgtgccg agatgtacca agtgtccaga ctgcagcaca 1860
tctgtgagct gttcatcatt acccagctgc agagcatgcc aagcagggaa ctggcatcca 1920
tgaaccttga tatagttgac ctgcttaaaa aggccaagtt tcaccactct gattgccttt 1980
caacctggct acttcatttc attgctacta actacctcat cttcagtcaa aagcctgaat 2040
ttcaggatct ttcagtggaa gaacgcagtt ttgttgaaaa gcacagatgg ccgtcgaata 2100
tgtacttgaa gcagcttgcg gaatacagga gtatattca ctcccggaaa tgtcgttgct 2160
tagtaatgta acctggagct tttatacact acatttcttt tttattatta tgaagaatgg 2220
gatacctcca ggttccagta aaattcttct gaccgaaacc aatgtgggtg ttagaaaaat 2280
```

```
taccatatag cttaatatgt ttattagttc tctttggaaa aaaactacca ctgtggtctt 2340
aaaagggaac aaaatatacc ataggctaaa actaaggctt tcactctaga atgcaaagct 2400
gttttgcagc tgttttccct taaagatgtc ctgttgcttt agtgatattt agacccctct 2460
cagttaagaa atgcttagat taaaaaaaaa aaattacgta ggattaatac agaaatttaa 2520
tcatgtctga ttaattgctc tattaaaata aggggcattt aaagacccag cataaccatt 2580
tgtataatga gaaatctagg ggaaaaccaa tcagtccaac atgagatttt aggaatagaa 2640
atttgccggc catttggaaa gtgaaatgcc acttagttct caattgatga cagtgtttga 2700
atcatcataa aaaaaatacc tgcttttcat ctggacaacc caattgagcc actttatctc 2760
cttttggcaa tctgagtagg cggggaacct aggcagggct ggctttctta gcgtgtaact 2820
tgtgtagcag cacagggccc acacttagaa ggaccccaca cttggttcaa ggctctgcta 2880
tagcggaaat tcttaataat gtttgaagaa gggccccatg atttcatttt gtgctgagcc 2940
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gataaattac tgctagaatg aacttgtcaa tgatggatgg taaattttca tggaagttat 6000
aaaagtgata aataaaaacc cttgctttta cccctgtcag tagccctcct cctaccactg 6060
aaccccattg cccctacccc tccttctaac tttattgctg tattctcttc actctatatt 6120
tctctctatt tgctaatatt gcattgctgt tacaataaaa attcaataaa gatttagtgg 6180
ttaagtgc                                                         6188
```

<210> 233
<211> 611

<212> PRT
<213> Homo sapiens

<400> 233

```
Met Ser Ile His Ile Val Ala Leu Gly Asn Glu Gly Asp Thr Phe His
              5                   10                  15
Gln Asp Asn Arg Pro Ser Gly Leu Ile Arg Thr Tyr Leu Gly Arg Ser
             20                  25                  30
Pro Leu Val Ser Gly Asp Glu Ser Ser Leu Leu Leu Asn Ala Ala Ser
             35                  40                  45
Thr Val Ala Arg Pro Val Phe Thr Glu Tyr Gln Ala Ser Ala Phe Gly
         50                  55                  60
Asn Val Lys Leu Val Val His Asp Cys Pro Val Trp Asp Ile Phe Asp
 65                  70                  75                  80
Ser Asp Trp Tyr Thr Ser Arg Asn Leu Ile Gly Gly Ala Asp Ile Ile
                 85                  90                  95
Val Ile Lys Tyr Asn Val Asn Asp Lys Phe Ser Phe His Glu Val Lys
                100                 105                 110
Asp Asn Tyr Ile Pro Val Ile Lys Arg Ala Leu Asn Ser Val Pro Val
             115                 120                 125
Ile Ile Ala Ala Val Gly Thr Arg Gln Asn Glu Glu Leu Pro Cys Thr
         130                 135                 140
Cys Pro Leu Cys Thr Ser Asp Arg Gly Ser Cys Val Ser Thr Thr Glu
145                 150                 155                 160
Gly Ile Gln Leu Ala Lys Glu Leu Gly Ala Thr Tyr Leu Glu Leu His
                 165                 170                 175
Ser Leu Asp Asp Phe Tyr Ile Gly Lys Tyr Phe Gly Gly Val Leu Glu
             180                 185                 190
Tyr Phe Met Ile Gln Ala Leu Asn Gln Lys Thr Ser Glu Lys Met Lys
         195                 200                 205
Lys Arg Lys Met Ser Asn Ser Phe His Gly Ile Arg Pro Pro Gln Leu
         210                 215                 220
Glu Gln Pro Glu Lys Met Pro Val Leu Lys Ala Glu Ala Ser His Tyr
225                 230                 235                 240
Asn Ser Asp Leu Asn Asn Leu Leu Phe Cys Cys Gln Cys Val Asp Val
                 245                 250                 255
Val Phe Tyr Asn Pro Asp Leu Lys Lys Val Val Glu Ala His Lys Ile
             260                 265                 270
Val Leu Cys Ala Val Ser His Val Phe Met Leu Leu Phe Asn Val Lys
         275                 280                 285
Ser Pro Thr Asp Ile Gln Asp Ser Ser Ile Ile Arg Thr Thr Gln Asp
         290                 295                 300
Leu Phe Ala Ile Asn Arg Asp Thr Ala Phe Pro Gly Ala Ser His Glu
305                 310                 315                 320
Ser Ser Gly Asn Pro Pro Leu Arg Val Ile Val Lys Asp Ala Leu Phe
                 325                 330                 335
Cys Ser Cys Leu Ser Asp Ile Leu Arg Phe Ile Tyr Ser Gly Ala Phe
             340                 345                 350
Gln Trp Glu Glu Leu Glu Glu Asp Ile Arg Lys Lys Leu Lys Asp Ser
         355                 360                 365
Gly Asp Val Ser Asn Val Ile Glu Lys Val Lys Cys Ile Leu Lys Thr
         370                 375                 380
Pro Gly Lys Ile Asn Cys Leu Arg Asn Cys Lys Thr Tyr Gln Ala Arg
385                 390                 395                 400
```

```
Lys Pro Leu Trp Phe Tyr Asn Thr Ser Leu Lys Phe Phe Leu Asn Lys
                405             410             415
Pro Met Leu Ala Asp Val Val Phe Glu Ile Gln Gly Thr Thr Val Pro
            420             425             430
Ala His Arg Ala Ile Leu Val Ala Arg Cys Glu Val Met Ala Ala Met
            435             440             445
Phe Asn Gly Asn Tyr Met Glu Ala Lys Ser Val Leu Ile Pro Val Tyr
    450             455             460
Gly Val Ser Lys Glu Thr Phe Leu Ser Phe Leu Glu Tyr Leu Tyr Thr
465             470             475             480
Asp Ser Cys Cys Pro Ala Gly Ile Phe Gln Ala Met Cys Leu Leu Ile
            485             490             495
Cys Ala Glu Met Tyr Gln Val Ser Arg Leu Gln His Ile Cys Glu Leu
            500             505             510
Phe Ile Ile Thr Gln Leu Gln Ser Met Pro Ser Arg Glu Leu Ala Ser
            515             520             525
Met Asn Leu Asp Ile Val Asp Leu Leu Lys Lys Ala Lys Phe His His
    530             535             540
Ser Asp Cys Leu Ser Thr Trp Leu Leu His Phe Ile Ala Thr Asn Tyr
545             550             555             560
Leu Ile Phe Ser Gln Lys Pro Glu Phe Gln Asp Leu Ser Val Glu Glu
            565             570             575
Arg Ser Phe Val Glu Lys His Arg Trp Pro Ser Asn Met Tyr Leu Lys
            580             585             590
Gln Leu Ala Glu Tyr Arg Lys Tyr Ile His Ser Arg Lys Cys Arg Cys
            595             600             605
Leu Val Met
    610
```

```
<210> 234
<211> 494
<212> PRT
<213> Homo sapiens

<400> 234
Met Tyr Ile Lys Met Ala Thr Leu Ala Asn Gly Gln Ala Asp Asn Ala
                5               10              15
Ser Leu Ser Thr Asn Gly Leu Gly Ser Ser Pro Gly Ser Ala Gly His
            20              25              30
Met Asn Gly Leu Ser His Ser Pro Gly Asn Pro Ser Thr Ile Pro Met
            35              40              45
Lys Asp His Asp Ala Ile Lys Leu Phe Ile Gly Gln Ile Pro Arg Asn
    50              55              60
Leu Asp Glu Lys Asp Leu Lys Pro Leu Phe Glu Glu Phe Gly Lys Ile
65              70              75              80
Tyr Glu Leu Thr Val Leu Lys Asp Arg Phe Thr Gly Met His Lys Gly
            85              90              95
Cys Ala Phe Leu Thr Tyr Cys Glu Arg Glu Ser Ala Leu Lys Ala Gln
            100             105             110
Ser Ala Leu His Glu Gln Lys Thr Leu Pro Gly Met Asn Arg Pro Ile
            115             120             125
Gln Val Lys Pro Ala Asp Ser Glu Ser Arg Gly Asp Arg Lys Leu Phe
            130             135             140
```

```
Val Gly Met Leu Asn Lys Gln Gln Ser Glu Asp Asp Val Arg Arg Leu
145             150             155             160
Phe Glu Ala Phe Gly Asn Ile Glu Glu Cys Thr Ile Leu Arg Gly Pro
            165             170             175
Asp Gly Asn Ser Lys Gly Cys Ala Phe Val Lys Tyr Ser Ser His Ala
            180             185             190
Glu Ala Gln Ala Ala Ile Asn Ala Leu His Gly Ser Gln Thr Met Pro
        195             200             205
Gly Ala Ser Ser Ser Leu Val Val Lys Phe Ala Asp Thr Asp Lys Glu
    210             215             220
Arg Thr Met Arg Arg Met Gln Gln Met Ala Gly Gln Met Gly Met Phe
225             230             235             240
Asn Pro Met Ala Ile Pro Phe Gly Ala Tyr Gly Ala Tyr Ala Gln Ala
            245             250             255
Leu Met Gln Gln Gln Ala Ala Leu Met Ala Ser Val Ala Gln Gly Gly
        260             265             270
Tyr Leu Asn Pro Met Ala Ala Phe Ala Ala Ala Gln Met Gln Gln Met
    275             280             285
Ala Ala Leu Asn Met Asn Gly Leu Ala Ala Ala Pro Met Thr Pro Thr
    290             295             300
Ser Gly Gly Ser Thr Pro Pro Gly Ile Thr Ala Pro Ala Val Pro Ser
305             310             315             320
Ile Pro Ser Pro Ile Gly Val Asn Gly Phe Thr Gly Leu Pro Pro Gln
            325             330             335
Ala Asn Gly Gln Pro Ala Ala Glu Ala Val Phe Ala Asn Gly Ile His
            340             345             350
Pro Tyr Pro Ala Gln Ser Pro Thr Ala Ala Asp Pro Leu Gln Gln Ala
    355             360             365
Tyr Ala Gly Val Gln Gln Tyr Ala Gly Pro Ala Tyr Pro Ala Ala Tyr
    370             375             380
Gly Gln Ile Ser Gln Ala Phe Pro Gln Pro Pro Pro Met Ile Pro Gln
385             390             395             400
Gln Gln Arg Glu Gly Pro Glu Gly Cys Asn Leu Phe Ile Tyr His Leu
            405             410             415
Pro Gln Glu Phe Gly Asp Ala Glu Leu Met Gln Met Phe Leu Pro Phe
            420             425             430
Gly Asn Val Ile Ser Ser Lys Val Phe Val Asp Arg Ala Thr Asn Gln
            435             440             445
Ser Lys Cys Phe Gly Phe Val Ser Phe Asp Asn Pro Ala Ser Ala Gln
    450             455             460
Thr Ala Ile Gln Ala Met Asn Gly Phe Gln Ile Gly Met Lys Arg Leu
465             470             475             480
Lys Val Gln Leu Lys Arg Pro Lys Asp Ala Asn Arg Pro Tyr
            485             490


<210> 235
<211> 826
<212> PRT
<213> Homo sapiens

<400> 235
Met Glu Gly Ala Gly Gly Ala Asn Asp Lys Lys Lys Ile Ser Ser Glu
                5               10              15
```

```
Arg Arg Lys Glu Lys Ser Arg Asp Ala Ala Arg Ser Arg Arg Ser Lys
            20                25                30
Glu Ser Glu Val Phe Tyr Glu Leu Ala His Gln Leu Pro Leu Pro His
            35                40                45
Asn Val Ser Ser His Leu Asp Lys Ala Ser Val Met Arg Leu Thr Ile
        50                55                60
Ser Tyr Leu Arg Val Arg Lys Leu Leu Asp Ala Gly Asp Leu Asp Ile
65                70                75                80
Glu Asp Asp Met Lys Ala Gln Met Asn Cys Phe Tyr Leu Lys Ala Leu
                85                90                95
Asp Gly Phe Val Met Val Leu Thr Asp Asp Gly Asp Met Ile Tyr Ile
            100               105               110
Ser Asp Asn Val Asn Lys Tyr Met Gly Leu Thr Gln Phe Glu Leu Thr
        115               120               125
Gly His Ser Val Phe Asp Phe Thr His Pro Cys Asp His Glu Glu Met
        130               135               140
Arg Glu Met Leu Thr His Arg Asn Gly Leu Val Lys Lys Gly Lys Glu
145               150               155               160
Gln Asn Thr Gln Arg Ser Phe Phe Leu Arg Met Lys Cys Thr Leu Thr
            165               170               175
Ser Arg Gly Arg Thr Met Asn Ile Lys Ser Ala Thr Trp Lys Val Leu
            180               185               190
His Cys Thr Gly His Ile His Val Tyr Asp Thr Asn Ser Asn Gln Pro
            195               200               205
Gln Cys Gly Tyr Lys Lys Pro Pro Met Thr Cys Leu Val Leu Ile Cys
        210               215               220
Glu Pro Ile Pro His Pro Ser Asn Ile Glu Ile Pro Leu Asp Ser Lys
225               230               235               240
Thr Phe Leu Ser Arg His Ser Leu Asp Met Lys Phe Ser Tyr Cys Asp
            245               250               255
Glu Arg Ile Thr Glu Leu Met Gly Tyr Glu Pro Glu Glu Leu Leu Gly
            260               265               270
Arg Ser Ile Tyr Glu Tyr Tyr His Ala Leu Asp Ser Asp His Leu Thr
            275               280               285
Lys Thr His His Asp Met Phe Thr Lys Gly Gln Val Thr Thr Gly Gln
        290               295               300
Tyr Arg Met Leu Ala Lys Arg Gly Gly Tyr Val Trp Val Glu Thr Gln
305               310               315               320
Ala Thr Val Ile Tyr Asn Thr Lys Asn Ser Gln Pro Gln Cys Ile Val
            325               330               335
Cys Val Asn Tyr Val Val Ser Gly Ile Ile Gln His Asp Leu Ile Phe
            340               345               350
Ser Leu Gln Gln Thr Glu Cys Val Leu Lys Pro Val Glu Ser Ser Asp
            355               360               365
Met Lys Met Thr Gln Leu Phe Thr Lys Val Glu Ser Glu Asp Thr Ser
        370               375               380
Ser Leu Phe Asp Lys Leu Lys Lys Glu Pro Asp Ala Leu Thr Leu Leu
385               390               395               400
Ala Pro Ala Ala Gly Asp Thr Ile Ile Ser Leu Asp Phe Gly Ser Asn
            405               410               415
Asp Thr Glu Thr Asp Asp Gln Gln Leu Glu Glu Val Pro Leu Tyr Asn
            420               425               430
Asp Val Met Leu Pro Ser Pro Asn Glu Lys Leu Gln Asn Ile Asn Leu
        435               440               445
```

```
Ala Met Ser Pro Leu Pro Thr Ala Glu Thr Pro Lys Pro Leu Arg Ser
    450                 455                 460
Ser Ala Asp Pro Ala Leu Asn Gln Glu Val Ala Leu Lys Leu Glu Pro
465                 470                 475                 480
Asn Pro Glu Ser Leu Glu Leu Ser Phe Thr Met Pro Gln Ile Gln Asp
                485                 490                 495
Gln Thr Pro Ser Pro Ser Asp Gly Ser Thr Arg Gln Ser Ser Pro Glu
                500                 505                 510
Pro Asn Ser Pro Ser Glu Tyr Cys Phe Tyr Val Asp Ser Asp Met Val
                515                 520                 525
Asn Glu Phe Lys Leu Glu Leu Val Glu Lys Leu Phe Ala Glu Asp Thr
    530                 535                 540
Glu Ala Lys Asn Pro Phe Ser Thr Gln Asp Thr Asp Leu Asp Leu Glu
545                 550                 555                 560
Met Leu Ala Pro Tyr Ile Pro Met Asp Asp Asp Phe Gln Leu Arg Ser
                565                 570                 575
Phe Asp Gln Leu Ser Pro Leu Glu Ser Ser Ser Ala Ser Pro Glu Ser
                580                 585                 590
Ala Ser Pro Gln Ser Thr Val Thr Val Phe Gln Gln Thr Gln Ile Gln
    595                 600                 605
Glu Pro Thr Ala Asn Ala Thr Thr Thr Thr Ala Thr Thr Asp Glu Leu
    610                 615                 620
Lys Thr Val Thr Lys Asp Arg Met Glu Asp Ile Lys Ile Leu Ile Ala
625                 630                 635                 640
Ser Pro Ser Pro Thr His Ile His Lys Glu Thr Thr Ser Ala Thr Ser
                645                 650                 655
Ser Pro Tyr Arg Asp Thr Gln Ser Arg Thr Ala Ser Pro Asn Arg Ala
                660                 665                 670
Gly Lys Gly Val Ile Glu Gln Thr Glu Lys Ser His Pro Arg Ser Pro
    675                 680                 685
Asn Val Leu Ser Val Ala Leu Ser Gln Arg Thr Thr Val Pro Glu Glu
    690                 695                 700
Glu Leu Asn Pro Lys Ile Leu Ala Leu Gln Asn Ala Gln Arg Lys Arg
705                 710                 715                 720
Lys Met Glu His Asp Gly Ser Leu Phe Gln Ala Val Gly Ile Gly Thr
                725                 730                 735
Leu Leu Gln Gln Pro Asp Asp His Ala Ala Thr Thr Ser Leu Ser Trp
                740                 745                 750
Lys Arg Val Lys Gly Cys Lys Ser Ser Glu Gln Asn Gly Met Glu Gln
    755                 760                 765
Lys Thr Ile Ile Leu Ile Pro Ser Asp Leu Ala Cys Arg Leu Leu Gly
    770                 775                 780
Gln Ser Met Asp Glu Ser Gly Leu Pro Gln Leu Thr Ser Tyr Asp Cys
785                 790                 795                 800
Glu Val Asn Ala Pro Ile Gln Gly Ser Arg Asn Leu Leu Gln Gly Glu
                805                 810                 815
Glu Leu Leu Arg Ala Leu Asp Gln Val Asn
    820                 825
```

<210> 236
<211> 342
<212> PRT
<213> Homo sapiens

```
<400> 236
Asn Asn Asn Asn Ser Lys His Thr Gly His Lys Ser Ala Cys Val Pro
              5               10              15
Asn Met Thr Glu Arg Arg Arg Asp Glu Leu Ser Glu Glu Ile Asn Asn
          20              25              30
Leu Arg Glu Lys Val Met Lys Gln Ser Glu Glu Asn Asn Asn Leu Gln
      35              40              45
Ser Gln Val Gln Lys Leu Thr Glu Glu Asn Thr Thr Leu Arg Glu Gln
  50              55              60
Val Glu Pro Thr Pro Glu Asp Glu Asp Asp Ile Glu Leu Arg Gly
65              70              75              80
Ala Ala Ala Ala Ala Ala Pro Pro Pro Ile Glu Glu Glu Cys Pro
              85              90              95
Glu Asp Leu Pro Glu Lys Phe Asp Gly Asn Pro Asp Met Leu Ala Pro
          100             105             110
Phe Met Ala Gln Cys Gln Ile Phe Met Glu Lys Ser Thr Arg Asp Phe
      115             120             125
Ser Val Asp Arg Val Arg Val Cys Phe Val Thr Ser Met Met Thr Gly
      130             135             140
Arg Ala Ala Arg Trp Ala Ser Ala Lys Leu Glu Arg Ser His Tyr Leu
145             150             155             160
Met His Asn Tyr Pro Ala Phe Met Met Glu Met Lys His Val Phe Glu
              165             170             175
Asp Pro Gln Arg Arg Glu Val Ala Lys Arg Lys Ile Arg Arg Leu Arg
          180             185             190
Gln Gly Met Gly Ser Val Ile Asp Tyr Ser Asn Ala Phe Gln Met Ile
          195             200             205
Ala Gln Asp Leu Asp Trp Asn Glu Pro Ala Leu Ile Asp Gln Tyr His
      210             215             220
Glu Gly Leu Ser Asp His Ile Gln Glu Glu Leu Ser His Leu Glu Val
225             230             235             240
Ala Lys Ser Leu Ser Ala Leu Ile Gly Gln Cys Ile His Ile Glu Arg
          245             250             255
Arg Leu Ala Arg Ala Ala Ala Ala Arg Lys Pro Arg Ser Pro Pro Arg
          260             265             270
Ala Leu Val Leu Pro His Ile Ala Ser His His Gln Val Asp Pro Thr
          275             280             285
Glu Pro Val Gly Gly Ala Arg Met Arg Leu Thr Gln Glu Glu Lys Glu
      290             295             300
Arg Arg Arg Lys Leu Asn Leu Cys Leu Tyr Cys Gly Thr Gly Gly His
305             310             315             320
Tyr Ala Asp Asn Cys Pro Ala Lys Ala Ser Lys Ser Ser Pro Ala Gly
              325             330             335
Asn Ser Pro Ala Pro Leu
          340


<210> 237
<211> 403
<212> DNA
<213> Homo sapiens

<400> 237
```

ccagtgtggt ggaattccag cctcgtgccg ggagtcgccg cattgtggtc cgcttctctg 60
cactatgtcg ggtggcctcc tgaaggcgct gcgcagcgac tcctacgtgg agctgagcca 120
gtaccgggac cagcacttcc ggggtgacaa tgaagaacaa gaaaaattac tgaagaaaag 180
ctgtacgtta tatgttggaa atctttcttt ttacacaact gaagaacaaa tctatgaact 240
cttcagcaaa agtggtgaca taaagaaaat cattatgggt ctggataaaa tgaagaaaac 300
agcatgtgga ttctgttttg tggaatatta ctcacgcgca gatgcggaaa acgccatgcg 360
gtacataaat gggacgcgtc tggatgaccg aatcattcgc aca   403

<210> 238
<211> 183
<212> DNA
<213> Homo sapiens

<400> 238
tattaatagt aatcaattac ggggtcatta gttcatagcc catatatgga gttccgcgtt 60
acataactta cggtaaatgg cccgcctggc tgaccgccca acgacccccg cccattgacg 120
tcaataatga cgtatgttcc catagtaacg ccaataggga ctttccattg acgtcaatgg 180
gtg   183

<210> 239
<211> 403
<212> DNA
<213> Homo sapiens

<400> 239
ttttgatgct ttctttcatg ggaatagtca cttttttatt tagtaaatcg cattgctgga 60
accaccaagg agtgtggaat gtccttgagt gtattattta tgcaagtcac agtcacgttg 120
ccatcatggc agctatgtga aacactaata aatgtgtttt tacttttttat tcccgttaaa 180
actgatgtaa aacaggataa aggcttgtta tagtcactta taagtatctg ggtctaagta 240
atttccttag atgtttctaa agaaacattt tcagctttgc tcccattatg attccaataa 300
ggaacgcttt cctagtgcaa ttttaggagt aaagtttgaa gagataaaaa tagccaaaga 360
taggagacgt ctgaattttg aatgataaac agtgatgttt taa   403

<210> 240
<211> 3148
<212> DNA
<213> Homo sapiens

<400> 240
aacttctcgg gaagatgagg cagtttggca tctgtggccg agttgctgtt gccgggtgat 60
agttggagcg gagacttagc ataatggcag aacctgtttc tccactgaag cactttgtgc 120
tggctaagaa ggcgattact gcagtctttg accagttact ggagtttgtt actgaaggat 180
cacattttgt tgaagcaaca tataagaatc cggaacttga tcgaatagcc actgaagatg 240
atctggtaga aatgcaagga tataaagaca agctttccat cattggtgag gtgctatctc 300
ggagacacat gaaggtggca tttttttggca ggacaagcag tgggaagagc tctgttatca 360
atgcaatgtt gtgggataaa gttctcccta gtgggattgg ccatataacc aattgcttcc 420
taagtgttga aggaactgat ggagataaag cctatcttat gacagaagga tcagatgaaa 480
aaaagagtgt gaagacagtt aatcaactgg cccatgccct tcacatggac aaagatttga 540
aagctggctg tcttgtacgt gtgttttggc caaaagcaaa atgtgccctc ttgagagatg 600
acctggtgtt agtagacagt ccaggcacag atgtcactac agagctggat agctggattg 660
ataagttttg cctagatgct gatgtctttg ttttggtcgc aaactctgaa tcaacactaa 720
tgaatacgga aaaacacttt tttcacaagg tgaatgagcg gctttccaag cctaatattt 780
tcattctcaa taatcgttgg gatgcctctg catcagagcc agaatatatg gaagacgtac 840
gcagacagca catggaaaga tgcctgcatt tcttggtgga ggagctcaaa gttgtaaatg 900

```
ctttagaagc acagaatcgt atcttctttg tttcagcaaa ggaagttctt agtgctagaa  960
agcaaaaagc acaggggatg ccagaaagtg gtgtggcact tgctgaagga tttcatgcaa 1020
gattacagga atttcagaat tttgaacaaa tctttgagga gtgtatctcg cagtcagcag 1080
tgaaaacaaa gttcgaacag cacactatca gagctaaaca gatactagct actgtgaaaa 1140
acataatgga ttcagtaaac ctggcagctg aagataaaag gtttcatgtg caatgacaga 1200
tgaaatttgt cgactgtctg ttttggttga tgaattttgt tcagagtttc atcctaatcc 1260
agatgtatta aaaatatata aaagtgaatt aaataagcac atagaggatg gtatgggaag 1320
aaatttggct gatcgatgca ccgatgaagt aaacgcctta gtgcttcaga cccagcaaga 1380
aattattgaa aatttgaagc cattacttcc agctggtata caggataaac tacatacact 1440
gatcccttgc aagaaatttg atctcagtta taatctaaat taccacaagt tatgttcaga 1500
ttttcaagag gatattgtat ttcgtttttc cctgggctgg tcttcccttg tacatcgatt 1560
tttgggccct agaaatgctc aaagggtgct cctaggatta tcagagccta tctttcagct 1620
ccctagatct ttagcttcta ctcccactgc tcctaccact ccagcaacgc cagataatgc 1680
atcacaggaa gaactcatga ttacattagt aacaggattg gcgtccgtta catctagaac 1740
ttctatgggc atcattattg ttggaggagt gatttggaaa actataggct ggaaactcct 1800
atctgtttca ttaactatgt atggagcttt gtatctttat gaaagactga gctggaccac 1860
ccatgccaag gagcgagcct ttaaacagca gtttgtaaac tatgcaactg aaaaactgag 1920
gatgattgtt agctccacga gtgcaaactg cagtcaccaa gtaaaacaac aaatagctac 1980
cacttttgct cgcctgtgcc aacaagttga tattactcaa aaacagctgg aagaagaaat 2040
tgctagatta cccaaagaaa tagatcagtt ggagaaaata caaaacaatt caaagctctt 2100
aagaaataaa gctgttcaac ttgaaaatga gctggagaat tttactaagc agtttctacc 2160
ttcaagcaat gaagaatcct aacaatagag attgctttgg tgaccatgat aggaggaaac 2220
gaaacttgta agattggaac agttgttatt tttatgaaat tactttaaat atgaattgta 2280
ctaactgtac ctaaatagca aagccctgtg tagattctgg taatgatctg tctcagggta 2340
tgtgtatttt tgaagagtgt tatgtcctta gttttaattt tgagtaaaga aaaggctaaa 2400
atcatgaatt agttacaagc aacagtacca acttatgtga cccctgaggg gtggggctgt 2460
gagctcttaa tttgtttttg attctgaaaa actctgcttc ctggcatcca ggagttagag 2520
attgagcctt tcatcttctt tctcaaaact agttttgat gctttctttc atgggaatag 2580
tcactttttt atttagtaaa tcgcattgct ggaaccacca aggagtgtgg aatgtccttg 2640
agtgtattat ttatgcaagt cacagtcacg ttgccatcat ggcagctatg tgaaacacta 2700
ataaatgtgt ttttactttt tattcccgtt aaaactgatg taaaacagga taaaggcttg 2760
ttatagtcac ttataagtat ctgggtctaa gtaatttcct tagatgtttc taaagaaaca 2820
ttttcagctt tgctcccatt atgattccaa taaggaacgc tttcctagtg caattttagg 2880
agtaaagttt gaagagataa aaatagccaa agataggaga cgtctgaatt ttgaatgata 2940
aacagtgatg ttttaaaaaa gctgttgttc ttcaggaggc atttgcctag gatattgctg 3000
gattataccc cattggaggc ttttaatttt atttgtatga attttccagg atttcattaa 3060
aaattattat tgtatttttt accttaatga aagattttgg gttcaaatat ctttctatat 3120
taaaagctga ttgagtctgt acatatgt                                    3148
```

```
<210> 241
<211> 283
<212> DNA
<213> Homo sapiens

<400> 241
ttattttttcc cctcaaattc atgattttta cgtctgttac aaagggaatt ttgctgatag  60
ctctttgggt cccactgttc cattttatgc taatagattc cattctaggg cccagccgtc 120
tcttgactga tggtgttccc tttaacccctt ggcatgtata atagaatttt ggtgaatgaa 180
agaacccaaa taggccagat agtcccccca ggccctgata tccataaaag gcttgggaat 240
gcattatgta attgtcctta gtcttttgt tgttttagaa aaa                    283

<210> 242
<211> 5526
<212> DNA
```

<213> Homo sapiens

<400> 242

```
cgggccctgg ggctcgggag tcgggggcgg tgggacagtg cggctactct tgatcctctc 60
cggctgcttg gtctacggca cagctgaaac tgatgtaaat gtggtcatgc ttcaggaatc 120
ccaagtttgt gaaaagcgtg ccagccaaca attctgttac acaaatgtgc ttatcccaaa 180
atggcatgat atatggacac ggatacagat ccgagtaaat agttccagat tggttcgagt 240
cacccaggtg gagaatgagg agaaactgaa ggagctagag cagtttagta tctggaactt 300
ttttccctcc tttttaaaag agaaattgaa tgacacctat gttaacgtgg gtctatacag 360
cacaaaaacc tgcctcaaag ttgagattat agagaaggac accaagtaca gtgtcattgt 420
gatccggaga tttgatccca aactctttct tgttttcctt cttggactta tgctattttt 480
ttgtggagac ttgctgagca gaagtcaaat tttctactac tctactggga tgactgtggg 540
aattgtggcc tctctgctaa tcatcatttt tatactatct aagtttatgc ctaagaaaag 600
tcccatttac gtcatcctgg tgggaggctg gtcttttttct ctgtacctca ttcaactagt 660
ttttaaaaat ttacaagaga tctggaggtg ttactggcag tatcttttaa gttatgtcct 720
cacagttgga ttcatgagtt ttgcagtatg ttacaagtat gggcccttgg agaatgaacg 780
aagtatcaac ctgctgacct ggaccttgca gctgatgggc ctgtgtttca tgtattctgg 840
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ggaacaccct attcagtggc tgtacatcac ctgcagaaag gtgtgtaagg gagcagaaaa 960
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<210> 243
<211> 303
<212> DNA
<213> Homo sapiens

<400> 243
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ccgctcgcgc cacggcctca tccgtgagag cctacaggtg gtgcgcagcc gagacccgcg 180
agctcaccgc atgcccttct tggaggccgc gggccacaag cttggcgcca agaaggaggg 240
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```
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<210> 244
<211> 2393
<212> DNA
<213> Homo sapiens

<400> 244
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cgccctcggc tccaggtcct acccggagcc gctgccatgg gagagccagc cttgggcgct 120
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tccaggctgc gcctgcagcg cagccgcgtg ccctgctccc gcagtggccc cggcgcccag 360
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gaaacaaaaa gccccattgg gcatgataag ccgaggaggc attcttccta aaagtagact 2340
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<210> 245
<211> 473
<212> DNA
<213> Homo sapiens
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<400> 245
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ctgcatcctt tacattagcc actaaatacg ttattgcttg atgaagacct ttcacagaat 180
cctatggatt gcagcatttc acttggctac ttcataccca tgccttaaag aggggcagtt 240
tctcaaaagc agaaacatgc cgccagttct caagtttcc tcctaactcc atttgaatgt 300
aagggcagct ggcccccaat gtggggaggt ccgaacattt tctgaattcc cattttcttg 360
ttcgcggcta aatgacagtt tctgtcatta cttagattcc gatctttccc aaaggtgttg 420
atttacaaag aggccagcta atagcagaaa tcatgaccct gaaagagaga tga   473

<210> 246
<211> 513
<212> DNA
<213> Homo sapiens

<400> 246
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atatggcctt taactgacct aaagaggtgt gttgtgattt aatttttttcc cgttccttttt 120
tcttcagtaa acccaacaat agtctaacct taaaaattga gttgatgtcc ttataggtca 180
ctacccctaa ataaacctga agcaggtgtt ttctcttgga catactaaaa aatacctaaa 240
aggaagctta gatggtctgt gacacaaaaa attcaattac tgtcatctaa tgccagctgt 300
taaaagtgtg gccactgagc atttgatttt ataggaaaaa atagtatttt tgagaataac 360
atagctgtgc tattgcacat ctgttggagg acatcccaga tttgcttata ctcagtgcct 420
gtgatattga gtttaaggat ttgaggcagg ggtaattatt aaacatattg cttctattct 480
tggaaaaata gaagtgtaaa atgttaataa tac   513

<210> 247
<211> 533
<212> DNA
<213> Homo sapiens

<400> 247
ccagtgtggt ggaattcgcg gtaggctggg accataacac aagcatgact atatgaagga 60
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aagagttgga tgcctttccg aaggttcctg agagctatgt agagacttca gccagtggag 180
gtacagtttc tctaatagca tttacaacta tggctttatt aaccataatg gaattctcag 240
tatatcaaga tacatggatg aagtatgaat acgaagtaga caaggatttt tctagcaaat 300
taagaattaa tatagatatt actgttgcca tgaagtgtca atatgttgga gcggatgtat 360
tggatttagc agaaacaatg gttgcatctg cagatggttt agtttatgaa ccaacagtat 420
ttgatctttc accacagcag aaagagtggc agaggatgct gcagctgatt cagagtaggc 480
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<210> 248
<211> 1362
<212> DNA
<213> Homo sapiens

<400> 248
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tttggtaaaa gagttggatg cctttccgaa ggttcctgag agctatgtag agacttcagc 180
cagtggaggt acagtttctc taatagcatt tacaactatg gctttattaa ccataatgga 240
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tagcaaatta agaattaata tagatattac tgttgccatg aagtgtcaat atgttggagc 360

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gagtaggcta caagaagagc attcacttca agatgtgata tttaaaagtg cttttaaaag 540
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aattcatggc catctatatg tcaataaagt agcagggaat tttcacataa cagtgggcaa 660
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<210> 249
<211> 513
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
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<223> n = A,T,C or G

<400> 249
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attcaaggag tacctctctc tagaactgta cgctgtacct gcatcagcat tagtaatcaa 180
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tcgaaggcca tcaagaattt actgaaagca gttagcaagg aaaggtctaa aagatctcct 360
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cctctcccat cacttcccta catggagtat atgtcaagcc ataattgttc ttagtttgca 480
gttacactaa aaggtgacca atcatggtca cca           513
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<210> 250
<211> 1172
<212> DNA
<213> Homo sapiens

<400> 250
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cctctcccat cacttcccta catggagtat atgtcaagcc ataattgttc ttagtttgca 480
gttacactaa aaggtgacca atgatggtca ccaaatcagc tgctactact cctgtaggaa 540
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tcagaatctc aaataactaa aaggtatgca atcaaatctg ctttttaaag aatgctcttt 780
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ttttaaaaat acagatagat atatgctctg catgttacat aagataaatg tgctgaatgg 1080
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aagatcaaaa ggttaataaa gtaattataa ct                            1172
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<210> 251
<211> 483
<212> DNA
<213> Homo sapiens

<400> 251
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gacatataga actttacaaa catatgtcca aggactctaa attgagactc ttccacatgt 120
acaatctcat catcctgaag cctataatga agaaaaagat ctagaaactg agttgtggag 180
ctgactctaa tcaaatgtga tgattggaat tagaccattt ggcctttgaa ctttcatagg 240
aaaaatgacc caacatttct tagcatgagc tacctcatct ctagaagctg ggatggactt 300
actattcttg tttatatttt agatactgaa aggtgctatg cttctgttat tattccaaga 360
ctggagatag gcagggctaa aaaggtatta ttatttttcc tttaatgatg gtgctaaaat 420
tcttcctata aaattcctta aaaataaaga tggtttaatc actaccattg tgaaaacata 480
act                                                            483
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<210> 252
<211> 156
<212> PRT
<213> Homo sapiens

<400> 252
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Met Ser Gly Gly Leu Leu Lys Ala Leu Arg Ser Asp Ser Tyr Val Glu
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Leu Ser Gln Tyr Arg Asp Gln His Phe Arg Gly Asp Asn Glu Glu Gln
                 20                  25                  30
Glu Lys Leu Leu Lys Lys Ser Cys Thr Leu Tyr Val Gly Asn Leu Ser
             35                  40                  45
Phe Tyr Thr Thr Glu Glu Gln Ile Tyr Glu Leu Phe Ser Lys Ser Gly
     50                  55                  60
Asp Ile Lys Lys Ile Ile Met Gly Leu Asp Lys Met Lys Lys Thr Ala
65                  70                  75                  80
Cys Gly Phe Cys Phe Val Glu Tyr Tyr Ser Arg Ala Asp Ala Glu Asn
                 85                  90                  95
Ala Met Arg Tyr Ile Asn Gly Thr Arg Leu Asp Asp Arg Ile Ile Arg
             100                 105                 110
Thr Asp Trp Asp Ala Gly Phe Lys Glu Gly Arg Gln Tyr Gly Arg Gly
         115                 120                 125
Arg Ser Gly Gly Gln Val Arg Asp Glu Tyr Arg Gln Asp Tyr Asp Ala
     130                 135                 140
Gly Arg Gly Gly Tyr Gly Lys Leu Ala Gln Asn Gln
145                 150                 155
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<210> 253
<211> 370
<212> PRT
<213> Homo sapiens

<400> 253
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Ala Ile Thr Ala Val Phe Asp Gln Leu Leu Glu Phe Val Thr Glu Gly
              20   25   30
Ser His Phe Val Glu Ala Thr Tyr Lys Asn Pro Glu Leu Asp Arg Ile
          35   40   45
Ala Thr Glu Asp Asp Leu Val Glu Met Gln Gly Tyr Lys Asp Lys Leu
      50   55   60
Ser Ile Ile Gly Glu Val Leu Ser Arg Arg His Met Lys Val Ala Phe
  65   70   75   80
Phe Gly Arg Thr Ser Ser Gly Lys Ser Ser Val Ile Asn Ala Met Leu
              85   90   95
Trp Asp Lys Val Leu Pro Ser Gly Ile Gly His Ile Thr Asn Cys Phe
          100   105   110
Leu Ser Val Glu Gly Thr Asp Gly Asp Lys Ala Tyr Leu Met Thr Glu
          115   120   125
Gly Ser Asp Glu Lys Lys Ser Val Lys Thr Val Asn Gln Leu Ala His
      130   135   140
Ala Leu His Met Asp Lys Asp Leu Lys Ala Gly Cys Leu Val Arg Val
145   150   155   160
Phe Trp Pro Lys Ala Lys Cys Ala Leu Leu Arg Asp Asp Leu Val Leu
              165   170   175
Val Asp Ser Pro Gly Thr Asp Val Thr Thr Glu Leu Asp Ser Trp Ile
          180   185   190
Asp Lys Phe Cys Leu Asp Ala Asp Val Phe Val Leu Val Ala Asn Ser
          195   200   205
Glu Ser Thr Leu Met Asn Thr Glu Lys His Phe Phe His Lys Val Asn
      210   215   220
Glu Arg Leu Ser Lys Pro Asn Ile Phe Ile Leu Asn Asn Arg Trp Asp
225   230   235   240
Ala Ser Ala Ser Glu Pro Glu Tyr Met Glu Asp Val Arg Arg Gln His
              245   250   255
Met Glu Arg Cys Leu His Phe Leu Val Glu Glu Leu Lys Val Val Asn
              260   265   270
Ala Leu Glu Ala Gln Asn Arg Ile Phe Phe Val Ser Ala Lys Glu Val
      275   280   285
Leu Ser Ala Arg Lys Gln Lys Ala Gln Gly Met Pro Glu Ser Gly Val
      290   295   300
Ala Leu Ala Glu Gly Phe His Ala Arg Leu Gln Glu Phe Gln Asn Phe
305   310   315   320
Glu Gln Ile Phe Glu Glu Cys Ile Ser Gln Ser Ala Val Lys Thr Lys
              325   330   335
Phe Glu Gln His Thr Ile Arg Ala Lys Gln Ile Leu Ala Thr Val Lys
          340   345   350
Asn Ile Met Asp Ser Val Asn Leu Ala Ala Glu Asp Lys Arg Phe His
          355   360   365

Val Gln
    370

<210> 254
<211> 429
<212> PRT
<213> Homo sapiens

<400> 254
Gly Pro Trp Gly Ser Gly Val Gly Gly Gly Thr Val Arg Leu Leu
                  5   10   15
Leu Ile Leu Ser Gly Cys Leu Val Tyr Gly Thr Ala Glu Thr Asp Val
                 20   25   30
Asn Val Val Met Leu Gln Glu Ser Gln Val Cys Glu Lys Arg Ala Ser
             35   40   45
Gln Gln Phe Cys Tyr Thr Asn Val Leu Ile Pro Lys Trp His Asp Ile
     50   55   60
Trp Thr Arg Ile Gln Ile Arg Val Asn Ser Ser Arg Leu Val Arg Val
 65   70   75   80
Thr Gln Val Glu Asn Glu Glu Lys Leu Lys Glu Leu Glu Gln Phe Ser
                 85   90   95
Ile Trp Asn Phe Phe Ser Ser Phe Leu Lys Glu Lys Leu Asn Asp Thr
                100   105   110
Tyr Val Asn Val Gly Leu Tyr Ser Thr Lys Thr Cys Leu Lys Val Glu
            115   120   125
Ile Ile Glu Lys Asp Thr Lys Tyr Ser Val Ile Val Ile Arg Arg Phe
        130   135   140
Asp Pro Lys Leu Phe Leu Val Phe Leu Leu Gly Leu Met Leu Phe Phe
145   150   155   160
Cys Gly Asp Leu Leu Ser Arg Ser Gln Ile Phe Tyr Tyr Ser Thr Gly
                165   170   175
Met Thr Val Gly Ile Val Ala Ser Leu Leu Ile Ile Ile Phe Ile Leu
            180   185   190
Ser Lys Phe Met Pro Lys Lys Ser Pro Ile Tyr Val Ile Leu Val Gly
            195   200   205
Gly Trp Ser Phe Ser Leu Tyr Leu Ile Gln Leu Val Phe Lys Asn Leu
        210   215   220
Gln Glu Ile Trp Arg Cys Tyr Trp Gln Tyr Leu Leu Ser Tyr Val Leu
225   230   235   240
Thr Val Gly Phe Met Ser Phe Ala Val Cys Tyr Lys Tyr Gly Pro Leu
                245   250   255
Glu Asn Glu Arg Ser Ile Asn Leu Leu Thr Trp Thr Leu Gln Leu Met
            260   265   270
Gly Leu Cys Phe Met Tyr Ser Gly Ile Gln Ile Pro His Ile Ala Leu
            275   280   285
Ala Ile Ile Ile Ile Ala Leu Cys Thr Lys Asn Leu Glu His Pro Ile
        290   295   300
Gln Trp Leu Tyr Ile Thr Cys Arg Lys Val Cys Lys Gly Ala Glu Lys
305   310   315   320
Pro Val Pro Pro Arg Leu Leu Thr Glu Glu Glu Tyr Arg Ile Gln Gly
                325   330   335
Glu Val Glu Thr Arg Lys Ala Leu Glu Glu Leu Arg Glu Phe Cys Asn
            340   345   350

Ser Pro Asp Cys Ser Ala Trp Lys Thr Val Ser Arg Ile Gln Ser Pro
     355   360   365

Lys Arg Phe Ala Asp Phe Val Glu Gly Ser Ser His Leu Thr Pro Asn
     370   375   380

Glu Val Ser Val His Glu Gln Glu Tyr Gly Leu Gly Ser Ile Ile Ala
385   390   395   400

Gln Asp Glu Ile Tyr Glu Glu Ala Ser Ser Glu Glu Glu Asp Ser Tyr
           405   410   415

Ser Arg Cys Pro Ala Ile Thr Gln Asn Asn Phe Leu Thr
     420   425

<210> 255
<211> 531
<212> PRT
<213> Homo sapiens

<400> 255
Met Ser Arg Ser Pro Gln Arg Ala Leu Pro Pro Gly Ala Leu Pro Arg
           5   10   15

Leu Leu Gln Ala Ala Pro Ala Ala Gln Pro Arg Ala Leu Leu Pro Gln
          20   25   30

Trp Pro Arg Arg Pro Gly Arg Arg Trp Pro Ala Ser Pro Leu Gly Met
          35   40   45

Lys Val Phe Arg Arg Lys Ala Leu Val Leu Cys Ala Gly Tyr Ala Leu
     50   55   60

Leu Leu Val Leu Thr Met Leu Asn Leu Leu Asp Tyr Lys Trp His Lys
65   70   75   80

Glu Pro Leu Gln Gln Cys Asn Pro Asp Gly Pro Leu Gly Ala Ala Ala
               85   90   95

Gly Ala Ala Gly Gly Lys Leu Gly Ala Pro Arg Ala Ala Ser Gly Arg
          100   105   110

Ala Ala Pro Cys Ser Cys Pro Phe Gly Pro Pro His Ser Leu Pro Pro
          115   120   125

Ser Arg Cys Arg Arg Arg Gly Asp Thr Leu Gln Pro Arg Gln Gly Trp
     130   135   140

Arg Gly Leu Arg Pro Leu Gln Ala Met Ala Leu Gly Ala Pro Glu Gly
145   150   155   160

Val Gly Asp Lys Arg His Trp Met Tyr Val Phe Thr Thr Trp Arg Ser
               165   170   175

Gly Ser Ser Phe Phe Gly Glu Leu Phe Asn Gln Asn Pro Glu Val Phe
          180   185   190

Phe Leu Tyr Glu Pro Val Trp His Val Trp Gln Lys Leu Tyr Pro Gly
          195   200   205

Asp Ala Val Ser Leu Gln Gly Ala Ala Arg Asp Met Leu Ser Ala Leu
     210   215   220

Tyr Arg Cys Asp Leu Ser Val Phe Gln Leu Tyr Ser Pro Ala Gly Ser
225   230   235   240

Gly Gly Arg Asn Leu Thr Thr Leu Gly Ile Phe Gly Ala Ala Thr Asn
          245   250   255

Lys Val Val Cys Ser Ser Pro Leu Cys Pro Ala Tyr Arg Lys Glu Val
          260   265   270

Val Gly Leu Val Asp Asp Arg Val Cys Lys Lys Cys Pro Pro Gln Arg
          275   280   285

Leu Ala Arg Phe Glu Glu Glu Cys Arg Lys Tyr Arg Thr Leu Val Ile
    290   295   300
Lys Gly Val Arg Val Phe Asp Val Ala Val Leu Ala Pro Leu Leu Arg
305   310   315   320
Asp Pro Ala Leu Asp Leu Lys Val Ile His Leu Val Arg Asp Pro Arg
            325   330   335
Ala Val Ala Ser Ser Arg Ile Arg Ser Arg His Gly Leu Ile Arg Glu
            340   345   350
Ser Leu Gln Val Val Arg Ser Arg Asp Pro Arg Ala His Arg Met Pro
            355   360   365
Phe Leu Glu Ala Ala Gly His Lys Leu Gly Ala Lys Lys Glu Gly Val
    370   375   380
Gly Gly Pro Ala Asp Tyr His Ala Leu Gly Ala Met Glu Val Ile Cys
385   390   395   400
Asn Ser Met Ala Lys Thr Leu Gln Thr Ala Leu Gln Pro Pro Asp Trp
            405   410   415
Leu Gln Gly His Tyr Leu Val Val Arg Tyr Glu Asp Leu Val Gly Asp
            420   425   430
Pro Val Lys Thr Leu Arg Arg Val Tyr Asp Phe Val Gly Leu Leu Val
            435   440   445
Ser Pro Glu Met Glu Gln Phe Ala Leu Asn Met Thr Ser Gly Ser Gly
    450   455   460
Ser Ser Ser Lys Pro Phe Val Val Ser Ala Arg Asn Ala Thr Gln Ala
465   470   475   480
Ala Asn Ala Trp Arg Thr Ala Leu Thr Phe Gln Gln Ile Lys Gln Val
            485   490   495
Glu Glu Phe Cys Tyr Gln Pro Met Ala Val Leu Gly Tyr Glu Arg Val
            500   505   510
Asn Ser Pro Glu Glu Val Lys Asp Leu Ser Lys Thr Leu Leu Arg Lys
            515   520   525
Pro Arg Leu
    530

<210> 256
<211> 378
<212> PRT
<213> Homo sapiens

<400> 256
Met Arg Arg Leu Asn Arg Lys Lys Thr Leu Ser Leu Val Lys Glu Leu
            5   10   15
Asp Ala Phe Pro Lys Val Pro Glu Ser Tyr Val Glu Thr Ser Ala Ser
            20   25   30
Gly Gly Thr Val Ser Leu Ile Ala Phe Thr Thr Met Ala Leu Leu Thr
            35   40   45
Ile Met Glu Phe Ser Val Tyr Gln Asp Thr Trp Met Lys Tyr Glu Tyr
    50   55   60
Glu Val Asp Lys Asp Phe Ser Ser Lys Leu Arg Ile Asn Ile Asp Ile
65   70   75   80
Thr Val Ala Met Lys Cys Gln Tyr Val Gly Ala Asp Val Leu Asp Leu
            85   90   95
Ala Glu Thr Met Val Ala Ser Ala Asp Gly Leu Val Tyr Glu Pro Thr
            100   105   110

```
Val Phe Asp Leu Ser Pro Gln Gln Lys Glu Trp Gln Arg Met Leu Gln
        115                 120                 125
Leu Ile Gln Ser Arg Leu Gln Glu Glu His Ser Leu Gln Asp Val Ile
        130                 135                 140
Phe Lys Ser Ala Phe Lys Ser Thr Ser Thr Ala Leu Pro Pro Arg Glu
145                 150                 155                 160
Asp Asp Ser Ser Gln Ser Pro Asn Ala Cys Arg Ile His Gly His Leu
                165                 170                 175
Tyr Val Asn Lys Val Ala Gly Asn Phe His Ile Thr Val Gly Lys Ala
                180                 185                 190
Ile Pro His Pro Arg Gly His Ala His Leu Gly Ser Thr Cys Gln Pro
                195                 200                 205
Trp Asn Leu Thr Ile Phe Ser His Arg Ile Asp His Leu Ser Phe Gly
        210                 215                 220
Glu Leu Val Pro Ala Ile Ile Asn Pro Leu Asp Gly Thr Glu Lys Ile
225                 230                 235                 240
Ala Ile Asp His Asn Gln Met Phe Gln Tyr Phe Ile Thr Val Val Pro
                245                 250                 255
Thr Lys Leu His Thr Tyr Lys Ile Ser Ala Asp Thr His Gln Phe Ser
        260                 265                 270
Val Thr Glu Arg Glu Arg Ile Ile Asn His Ala Ala Gly Ser His Gly
        275                 280                 285
Val Ser Gly Ile Phe Met Lys Tyr Asp Leu Ser Ser Leu Met Val Thr
        290                 295                 300
Val Thr Glu Glu His Met Pro Phe Trp Gln Phe Phe Val Arg Leu Cys
305                 310                 315                 320
Gly Ile Val Gly Gly Ile Phe Ser Thr Thr Gly Met Leu His Gly Ile
                325                 330                 335
Gly Lys Phe Ile Val Glu Ile Ile Cys Cys Arg Phe Arg Leu Gly Ser
                340                 345                 350
Tyr Lys Pro Val Asn Ser Val Pro Phe Glu Asp Gly His Thr Asp Asn
        355                 360                 365
His Leu Pro Leu Leu Glu Asn Asn Thr His
        370                 375
```

```
<210> 257
<211> 98
<212> PRT
<213> Homo sapiens

<400> 257
Met Asn Gln Thr Ala Ile Leu Ile Cys Cys Leu Ile Phe Leu Thr Leu
                5                  10                  15
Ser Gly Ile Gln Gly Val Pro Leu Ser Arg Thr Val Arg Cys Thr Cys
        20                  25                  30
Ile Ser Ile Ser Asn Gln Pro Val Asn Pro Arg Ser Leu Glu Lys Leu
        35                  40                  45
Glu Ile Ile Pro Ala Ser Gln Phe Cys Pro Arg Val Glu Ile Ile Ala
        50                  55                  60
Thr Met Lys Lys Lys Gly Glu Lys Arg Cys Leu Asn Pro Glu Ser Lys
65                  70                  75                  80
Ala Ile Lys Asn Leu Leu Lys Ala Val Ser Lys Glu Met Ser Lys Arg
                85                  90                  95
```

Ser Pro

<210> 258
<211> 530
<212> DNA
<213> Homo sapiens

<400> 258
gaattcggca cgagggctgg aggctgagat gcaggagctc gccatccagc tgcacaagcg 60
ctgcgaggag gtagaggcca cgcgggggcca ggtgtgtcag gagcaggagc tgcgcgccgt 120
ggtggagagc tgctgctgga gcaggaccgc gcccgcgagg acctccaggc ccggctgcgg 180
gagacgtggg ccctggcccg ggatgctgcc ctcgtcctgg accagctgcg agcctgtcaa 240
gctgagctgt catctcgagt gaggcaggac cagcccctg gtacagccac tctgggccta 300
gccgtccccc cagctgactc caagggctgg caagcgtccc tgcaggccat gagcctcccc 360
gagctctcgg gagccctgga ggaccgtgtc cgtgagatgg ggcaagcact gtgcttagtg 420
acccagagcc tggagaagct gcaggtgctg aacgggaaga agtggcggga gacctagcct 480
gcgggccgaa tctgacgttg ggtgattggt ccaccctgaa gctgtgtgcc 530

<210> 259
<211> 349
<212> DNA
<213> Homo sapiens

<400> 259
gaattcggca cgaggccagt tcagtctgca agcgccagct cctctcatgg ccggcttacc 60
caccgccttg ccaatgccca ggggcaaacc tcataccacc acttccagaa cactgatcat 120
gacaaccaac aatcaggtac gtggtcctct ggcacccttc ccgctggtgg tccctgggaa 180
cagcatccga gctgtgatat gcactagagg agattgatgg tcctttgaat tagaagagta 240
acttttgag tatttggcca ttggtgtgtt gttctaggaa atcctctctt ttttgtggtg 300
ttgaggtccc ccatgtatag tttcagcagc gaggacactg tggttcttg 349

<210> 260
<211> 509
<212> DNA
<213> Homo sapiens

<400> 260
gaattcggca cgaggcaatc atggcgccac ctgtgagata ctgcatcccc ggcgaacgtc 60
tgtgtaactt ggaggagggc agcccgggca gcggcaccta cacccgccac ggctacatct 120
tttcgtcgct tgccggctgt ctgatgaaga gcagcgagaa tggcgcgctt ccagtggtgt 180
ctgtagtgag agaaacagag tcccagttac tgccagatgt gggagctatt gtaacctgta 240
aggtctctag catcaattca cgctttgcca aagtacacat cctgtatgtg gggtccatgc 300
ctcttaagaa ctctttttcga ggaactatcc gcaaggaaga gtccgagca actgaaaaag 360
acaaggttga aatttataag agtttccgcc caggtgacat tgtcttggcc aaagtgatct 420
ccttaggtga tgcacagtcc aactacctgc taaccaccgc cgagaacgag ctgggagtgg 480
tggtagccca cagtgagtca ggtatccag 509

<210> 261
<211> 510
<212> DNA
<213> Homo sapiens

<400> 261

```
gaattcggca cgaggtgcat gttgtgtgag gatcccgggg ccgccgcgtc gctcgggccc 60
cgccatggcc gtcaccatca cgctcaaaac gctgcagcag cagaccttca agatccgcat 120
ggagcctgac gagacggtga aggtgctaaa ggagaagata gaagctgaga agggtcgtga 180
tgccttcccc gtggctggac agaaactcat ctatgccggc aagatcttga gtgacgatgt 240
ccctatcagg gactatcgca tcgatgagaa gaactttgtg gtcgtcatgg tgaccaagac 300
caaagccggc cagggtacct cagcaccccc agaggcctca cccacagctg ccccagagtc 360
ctctacatcc ttcccgcctg cccccacctc aggcatgtcc catcccccac ctgccgccag 420
agaggacaag agcccatcag aggaatccgc ccccacgacg tccccagagt ctgtgtcagg 480
ctcttgttcc ctcttcaggt aacaaccggg                                  510
```

```
<210> 262
<211> 432
<212> DNA
<213> Homo sapiens
```

```
<400> 262
gacatgtaat tcttatttat ttttcaccct caacaaggaa gaaaggtctc tccctcaatt 60
ctgctcttcc aatacttgag gataggcacc cctaaccctc cttcctccag ggaggcctca 120
gcatcagtgt ctgtggacgt agtctctgaa gagtgcttca gctgatgggg aaggagaaac 180
tcaagacaga gatcctccta gggatggcgt cactttcctg ccaactttct cgttgcctct 240
ccttgaaagc agaagaagtg ccagccctca gcttccgtca gatcttgggc tcctagggcc 300
ttgtacaagt ccatggccct ctggttccag tccaggacgg ccaggcggaa ttgggagcag 360
cccttatcca aggccacctc agccaccttt ttgattattt tggaaccaat cccttgaccc 420
cgatattccg gc                                                     432
```

```
<210> 263
<211> 614
<212> DNA
<213> Homo sapiens
```

```
<400> 263
gaattcggca cgaggcgcag agttgtcgct actggagaag tccctgggac tgagtaaggg 60
gaataaatac agtgctcagg gcgagcgaca gattccagtt cttcagacaa acaatggtcc 120
aagtctaaca ggattgacta ctatagcagc tcatctagtc aagcaagcca acaaagaata 180
tttgctgggg agtactgcag aagaaaaagc aatcgttcag cagtggttag aatacagggt 240
cactcaagta gatgggcact ccagtaaaaa tgacatccac acactgttga aggatcttaa 300
ttcatatctt gaagataaag tctaccttac agggtataac tttacattag cagatatact 360
attgtactat ggacttcatc gctttatagt tgacctgaca gttcaagaaa aggagaaata 420
tcttaatgta tctcgctggt tttgtcacat tcagcattat ccaggcatca ggcaacatct 480
gtctagtgtt ggtcttcatc aagaacagac tatatactaa ttcccctaga aagctgtcca 540
tgccatacag aagatctatt aaaaaatgtt ttaaaatgga aaatgtactc ttagaaccac 600
aggacttaat ggta                                                   614
```

```
<210> 264
<211> 336
<212> DNA
<213> Homo sapiens
```

```
<400> 264
gaattcggca cgaggggcac aacagagccg ctcccctctc ctcgccccgc caccgggacg 60
gagagcgccc gccggtgcat ttccggcgac acctcgcagt cattcctgcg gcttgcgcgc 120
ccttgtagac agccggggcc ttcgtgagaa cggtgcaggc ctggggtagt ctcctgtctg 180
gacagagaag agaaaaatgc aggacactgg ctcaagagtg cctttgcatt ggtttggctt 240
tggctaccca gcactggttg cttctggtgg gaatatttgc tattgaaaag caagcaagcg 300
```

```
tgccgtccct ggctgcaggg ctgctctttt ggaagt                              336
```

<210> 265
<211> 487
<212> DNA
<213> Homo sapiens

<400> 265
```
gaattcggca cgaggtgact gtgggaaact cggaaacaag ctcacatctt cctgtgggaa 60
accttctagc aacaggatga gtctgcagtg gactgcagtt gccaccttcc tctatgcgga 120
ggtctttgtt gtgttgcttc tctgcattcc cttcatttct cctaaaagat ggcagaagat 180
tttcaagtcc cggctggtgg agttgttagt gtcctatggc aacaccttct ttgtggttct 240
cattgtcatc cttgtgctgt tggtcatcga tgccgtgcgc gaaattcgga agtatgatga 300
tgtgacggaa aaggtgaacc tccagaacaa tcccgggggcc atggagcact tccacatgaa 360
gcttttccgt gcccagagga atctctacat tgctggcttt tccttgctgc tgtccttcct 420
gcttagacgc ctggtgactc tcatttcgca gcaggccacg ctgctggcct ccaatgaagc 480
ctttaaa                                                              487
```

<210> 266
<211> 418
<212> DNA
<213> Homo sapiens

<400> 266
```
gaattcggca cgaggccgtg acctgctagc tgagcagcgc ttcccgggcc gcgtgctgcc 60
ctcggacttg gacctgctgt tgcacatgaa caacgcgcgc tacctgcgcg aggccgactt 120
tgcgcgcgtc gcgcacctga cccgctgcgg ggtgctcggg gcgctgaggg agttgcgggc 180
gcacacggtg ctggcggcct cgtgcgcgcg ccaccgccgc tcgctgcgcc tgctggagcc 240
cttcgaggtg cgcacccgcc tgctgggctg ggacgaccgc gcgttctacc tggaggcgcg 300
ctttgtcagc ctgcgggacg gtttcgtgtg cgcgctgctg cgcttccggc agcacctgct 360
gggcacctca cccgagcgcg tcgtgcagca cctgtgccaa cgcaaggtgg aacccccct  418
```

<210> 267
<211> 418
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(418)
<223> n = A,T,C or G

<400> 267
```
gaattcggca cgaggctggc tcccacccgt gagttggctc aacagattga ggaagagacc 60
atcaagtttg ggaaaccgct aggtatccgc actgtggctg tcattggtgg catctccaga 120
gaagaccagg gcttcaggct gcgcatgggt tgtgagattg tgattgctcc cctgggcgtt 180
tgattgatgt gctggaaaac ccgtnccttg tgcttgaccc gctgtaccta tgtggttctg 240
gatgaggcag ataggatgat tgacatgggc tttgagccag atgtccagaa gatcctggag 300
cacatgcctt gtcagcaacc agaagcccaa acacggatga agcttgagga cccctgagaa 360
aaatgcttgg ccaactttg agtcgggaaa acattaagta cccgcccaaa cagtcatt   418
```

<210> 268
<211> 266
<212> DNA

<213> Homo sapiens

<400> 268
gaattcggca cgagggcttc tcactgagtg cctactttta tgtcctgcct gtggtgagca 60
caaatgttga gcacatcaat ccccattttg tagacgaaga gacagagttg agtgacttgc 120
ccaaagacac agggccagtg aggagttgtg caggtttgcc ctggcattaa aataataaac 180
attgaaattc agtcgattcc cctatggact cagttataga tctcatcagt tgaaggaaga 240
gagatgcctt ttcctattca accttt 266

<210> 269
<211> 235
<212> DNA
<213> Homo sapiens

<400> 269
gaattcggca cgagggctcc tgcagccttt tcgctgggac tgcgcgacac cgccccccga 60
ccgggtgccc gctgtgtgcc aggccgggtg ctgggcacgg tcccgcgagt gccctataag 120
gactgccagg caataatgaa ggttctttta ctgaaggatg cgaaggaaga tgactgtggc 180
caggatccgt atatcaggga attaggatta tatggacttg aagccacttt gatcc 235

<210> 270
<211> 386
<212> DNA
<213> Homo sapiens

<400> 270
gaattcggca cgagggttcc tcgcgggccg ccgggtgctg gtcaccgggg caggcaaagg 60
tatagggcgc ggcacggtcc aggcgctgca cgcgacgggc gcgcgggtgg tggctgtgag 120
ccggactcag gcggatcttg acagccttgt ccgcgagtgc ccggggatag aacccgtgtg 180
cgtggacctg ggtgactggg aggccaccga gcgggcgctt gggcagcgtg ggccccgtgg 240
acctgctggt gaacaacgcc cgctgtcgcc ctgctgcagc ccttcctgga ggtcaccaag 300
gaggcctttg acagatcctt tgaggtgaac ctgcgtgcgg catccagtgt cacagattgt 360
ggcagggggct taatacccgg gagtcc 386

<210> 271
<211> 406
<212> DNA
<213> Homo sapiens

<400> 271
gaattcggca cgaggggctg ctggctggct aagtccctcc cgctcccggc tctcgcctca 60
ctaggagcgg ctctcggtgc agcgggacag ggcgaagcgg cctgcgccca cggagcgcgc 120
gacactgccc ggaagggacc gccacccttg cccctcagc tgcccactcg tgatttccag 180
cggcctccgc gcgcgcacga tgccctcggc caccagccac agcgggagcg gcagcaagtc 240
gtccggaccg ccaccgccgt cgggttcctc cgggagtgag gcggccgcgg gagccggggc 300
cgccgcgccg gcttctagca ccccgcaacc ggcaccggcg ctgtccagac cgaggccatg 360
aagcagattc tcggggtgat cgacaagaaa cttcggaacc tggaga 406

<210> 272
<211> 365
<212> DNA
<213> Homo sapiens

<400> 272

```
gaattcggca cgaggctcgc ctcactagga gcggctctcg gtgcagcggg acagggcgaa 60
gcggcctgcg cccacggagc gcgcgacact gcccggaagg gaccgccacc cttgccccct 120
cagctgccca ctcgtgattt ccagcggcct ccgcgcgcgc acgatgccct cggccaccag 180
ccacagcggg agcggcagca agtcgtccgg accgccaccg ccgtcgggtt cctccgggag 240
tgaggcggcc gcgggagccg gggccgcgcg ccggcttcta gcaccccgca accggcaccg 300
gcgctgtcca gaccgaggcc atgaagcaga ttctcggggt gatcgacaag aaacttcgga 360
acctg                                                           365
```

<210> 273
<211> 376
<212> DNA
<213> Homo sapiens

<400> 273
```
gaattcggca cgaggctttg gccactcaga gcccccgggc cgcggtcgtc gtacgcctga 60
aggcgggtcg tgccggcggc cgctctagtc tccgcctccg ctcaggccgg tcctccgggg 120
cttctcaatg gtttcccggt ggcctctcaa tggttttccc ggcggccctt gcgccgacgc 180
caggagactt ccggagcttg gtgacgtcac agagcgagct tttctaccca aatacgcggc 240
gggggaatag gctcgagggc ggggagcagt gacaattgct aggcggagac agtgcaggga 300
agagagacct tataaaggat caggactggc gggaggtatt taactgaaag gaatatctgc 360
ttcactgttg caacca                                               376
```

<210> 274
<211> 385
<212> DNA
<213> Homo sapiens

<400> 274
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gaattcggca cgaggcttgg gtccgtcgct gcttcggtgt ccctgtcggg cttcccagca 60
gcggcctagc gggaaaagta aaagatgtct gaatatattc gggtaaccga agatgagaac 120
gatgagccca ttgaaatacc atcggaagac gatgggacgg tgctgctctc cacggttaca 180
gcccagtttc caggggcgtg tgggcttcgc tacaggaatc cagtgtctca gtgtatgaga 240
ggtgtccggc tggtagaagg aattctgcat gccccagatg ctggctgggg aaatctggtg 300
tatgttgtca actatccaaa agataacaaa agaaaaatgg atgagacaga tgcttcatca 360
gcagtgaaag tgaaaagagc agtcc                                     385
```

<210> 275
<211> 395
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(395)
<223> n = A,T,C or G

<400> 275
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gaattcggca cgaggggggag cggagagcgg accccagaga gccctgagca gccccaccgc 60
cgccgccggc ctagttacca tcacaccccg ggaggagccg cagctgccgc agccggcccc 120
agtcaccatc accgcaacca tgagcagcga ggccgagacc cagcagccgc ccgccgcccc 180
ccccgccgcc cccgccctca gcgccgccga caccaagccc ggcactacgg gcagcggcgc 240
aaggagcggt ggcccgggcg gcctcacatt cggcggggcc ttgccggcgg ggacaaagaa 300
agggcattcg caacgaaggg ttttgggaaa caagtaaaat gggttcaatt gtaagggaac 360
cggatttggg ttttnattca accagggaaa ttgac                          395
```

<210> 276
<211> 282
<212> DNA
<213> Homo sapiens

<400> 276
gaattcggca cgagggcagg ggtggtcctg gctggcattg cctgagccgg cagtgatgaa 60
gtggggagct tgcccttgac aggtgggggc tggctggggc cttaatgtga aaagacagtg 120
gcaggcagct ggagtagagc gagcccagca gccctaaaag gctgccttca tggccatcta 180
gccccagttc agggcagcat ccatagccca caagccagcg tgggtggggc gggggtggtc 240
ccacagctgg gttccacctg aagagcctcc gtgcctcgga gc 282

<210> 277
<211> 615
<212> DNA
<213> Homo sapiens

<400> 277
gaattcggca cgaggccggt cggcctgggc aacctgcgct gaagatgccg ggaaaactcc 60
gtagtgacgc tggtttggaa tcagacaccg caatgaaaaa aggggagaca ctgcgaaagc 120
aaaccgagga gaaagagaaa aaagagaagc caaaatctga taagactgaa gagatagcag 180
aagaggaaga aactgttttc cccaaagcta aacaagttaa aaagaaagca gagccttctg 240
aagttgacat gaattctcct aaatccaaaa aggcaaaaaa gaaagaggag ccatctcaaa 300
atgacatttc tcctaaaacc aaaagtttga gaaagaaaaa ggagcccatt gaaaagaaag 360
tggtttcttc taaaaccaaa aaagtgacaa aaaatgagga gccttctgag gaagaaatag 420
atgctcctaa gcccaagaag atgaagaaag aaaaggaaat gaatggagaa actagagaga 480
aaagccccaa actgaagaat ggatttcctc atcctgaacc ggactgtaac cccagtgaag 540
ctgccagtga agaaagtaac agtgagatag agcaggaaat cctgtggaac aaaaagaagg 600
cgctttctct atttt 615

<210> 278
<211> 316
<212> DNA
<213> Homo sapiens

<400> 278
gaattcggca cgaggagaaa gggaaaaaag gcgtaaagac agacatgaag caagtgggtt 60
tgcaaggaga ccagatccag attctgatga agatgaagat tatgagcgag agaggaggaa 120
aagaagtatg ggcggagctg ccattgcccc acccacttct ctggtagaga aagacaaaga 180
gttaccccga gattttcctt atgaagaagg actcaagacc tcgatcacag tctttccaag 240
cagccctttc ttcccccagt gtaccgaagg aaccaagaac agacccgaga atcttccacc 300
cggacccttta gcaaac 316

<210> 279
<211> 393
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(393)
<223> n = A,T,C or G

<400> 279
gaattcggca cgagggtgaa accaacttat tgggctcaat cccatttggt cacaggatac 60
tgtacgtatc ttcctttcca gagatttgat atcacccaga caccgccagc atacataaac 120
gtgttaccag gtttgcccca gtacaccagc atatatacac ccttggccag cctttctcct 180
gaatatcagc taccaagatc agtaccagtg gtgccgtctt ttgtagccaa tgacagagca 240
gaaaaaaatg ctggctgcct attttgnggg gcattcattt tgaaatggct tgagaaatgg 300
ttggctgggt cacccagaat tggccttctt gaaaaccaca agaatccctt tggaaggggg 360
cttctttttg gggaaaataa tcttggtaaa aag 393

<210> 280
<211> 454
<212> DNA
<213> Homo sapiens

<400> 280
gaattcggca cgaggcagca atgcggtaga tatgacgtaa acaaattata attaagctag 60
tggatactca gagatcaaaa gaactgcaca ttgcattctg gagcatgaga aatcattttt 120
tttttcatga tgtctaactc tactgaattt attcaatgga gataacagaa agatgattat 180
atatgattaa attacttcca gtattagcag atgcttattt aaatacttgc ttgttctttc 240
tgcaattcca catagaatta aggcaatagt ttaaaagaaa atttaaaaag taacttttct 300
agcattttaa tgtagacctg tgaattctaa cacatttgca gtgtagccat cctaatgact 360
aaccagactt gaacaaaatc caacttgcaa aaacgatgca atataaatac caatcaccaa 420
taataggtag tctcactttt aaaaacctgt gtct 454

<210> 281
<211> 613
<212> DNA
<213> Homo sapiens

<400> 281
gaattcggca cgaggtgcgc tcttcgttgc ccagtttccg ctcagtggtc gcgtctccgc 60
cccccaccca ccagtcccgc tgcattctcg gccgggctct aggcgccatg gctccccgcg 120
ggaggaagcg taaggctgag gccgcggtgg tcgccgtagc cgagaagcga gagaagctgg 180
cgaacggcgg ggagggaatg gaggaggcga ccgttgttat cgagcattgc actagctgac 240
gcgtctatgg gcgcaacgcc gcggccctga gccaggcgct gcgcctggag gccccagagc 300
ttccagtaaa ggtgaacccg acgaagcccc ggaggggcag cttcgaggtg acgctgctgc 360
gcccggacgg cagcagtgcg gagctctgga ctgggattaa gaaggggccc ccacgcaaac 420
tcaaattccc tgagcctcaa gaggtggtgg aagagttgaa gaagtacctg tcgtagggag 480
atttgggtag aagccctcat gctgagcttt gtgtccctgg tgatgttgga acattaatga 540
tggaacatgg ccaaacttca gtcatgatcc tgaagccatg gtttcttccc tgccagaaat 600
gaaggttcat tat 613

<210> 282
<211> 313
<212> DNA
<213> Homo sapiens

<400> 282
gaattcggca cgaggcgaga acgggcacgg ggagcagcag cctcaaccgc cggcgacgca 60
gcagcaacag ccccaacagc agcgcggggc cgccaaggag gccgcgggga agagcagcgg 120
ccccacctcg ctgttcgcgg tgacggtggc gccgcccggg gcgaggcagg gccagcagca 180
ggcgggaggt aagaagaagg cggaaggcgg cggaggcggc ggtcgccccg gggctccggc 240
ggcgggggac ggcaaaacag aacagaaagg cggagataaa aagaggggtg ttaaaagacc 300
accacaagat cat 313

<210> 283
<211> 557
<212> DNA
<213> Homo sapiens

<400> 283
gaattcggca cgaggcctgg ccgggagac gagttgcatg tgttggttca gctggcgata 60
gcggcgggag cggagccggc ggggcctgtg cgaccgcctg ggtttgtgaa atggctgctg 120
acatttctga atccagcggg gctgactgca aaggagaccc aaggaacagt gccaagttag 180
atgccgatta cccacttcga gtcctttatt gtggagtctg ttcattacca acagagtact 240
gtgaatatat gcctgatgtt gctaaatgta gacaatggtt agagaagaat tttccaaatg 300
aatttgcaaa acttactgta gaaaattcac ccaaacaaga agctggaatt agtgagggtc 360
aaggaacagc aggggaagaa gaggagaaga aaaaacagaa gagaggtgga aggggtcaaa 420
taaaacaaaa aaagaagacc gtaccacaaa aggttactat agccaaaatt cccagagcaa 480
agaagaaata tgtgacaaga gtatgtggcc ttgcaacttt tgaaattgat cttaaagaag 540
cacaaagatt ttttgct 557

<210> 284
<211> 627
<212> DNA
<213> Homo sapiens

<400> 284
gaattcggca cgaggctcac taggagcggc tctcggtgca gcgggacagg gcgaagcggc 60
ctgcgcccac ggagcgcgcg acactgcccg gaagggaccg ccacccttgc cccctcagct 120
gcccactcgt gatttccagc ggcctccgcg cgcgcacgat gccctcggcc accagccaca 180
gcgggagcgg cagcaagtcg tccggaccgc caccgccgtc gggttcctcc gggagtgagg 240
cggccgcggg agccgggggcc gccgcgccgg cttctcagca ccccgcaacc ggcaccggcg 300
ctgtccagac cgaggccatg aagcagattc tcggggtgat cgacaagaaa cttcggaacc 360
tggagaagaa aaagggtaag cttgatgatt accaggaacg aatgaacaaa ggggaaaggc 420
ttaatcaaga tcagctggat gccgtttcta agtaccagga agtcacaaat aatttggagt 480
ttgcaaaaga attacagagg agtttcatgg cactaagtca agatattcag aaaacaataa 540
agaagacagc acgtcgggag cagcttatga aaaaagaact gaacagaaac gtttaaaaac 600
ttgtacttga actacagtat tgtttgg 627

<210> 285
<211> 474
<212> DNA
<213> Homo sapiens

<400> 285
gaattcggca cgagggcgag aacgaccccc ggaccgacca aagcccgcgc gccgctgcat 60
cccgcgtcca gcacctacgt cccgctgccg tcgccgccgc caccatgccc aagagaaagg 120
ctgaagggga tgctaaggga gataaagcaa aggtgaagga cgaaccacag agaagatccg 180
cgaggttgtc tgctaaacct gctcctccaa agccagagcc caagcctaaa aaggccccctg 240
caaagaaggg agagaaggta cccaaaggga aaaagggaaa agctgatgct ggcaaggagg 300
ggaataaccc tgcagaaaat ggagatgcca aaacagacca ggcacagaaa gctgaaggtg 360
ctggagatgc caagtgaagt gtgtgcattt ttgataactg tgtacttctg gtgactgtac 420
agtttgaaat actatttttt atcaagtttt ataaaaatgc agaattttgg ttta 474

<210> 286
<211> 576
<212> DNA

<213> Homo sapiens

<400> 286
gaattcggca cgaggggaat ctgtgaagct cactactgga ccaaacaacg ctggagctca 60
aagtagttct tcatgtggga cttctggcct tccagtttct gcacagacag ccttggcaga 120
acaacagcca aaaagcatga aaagcccagc ttctccagag cctggtttct gtgctactct 180
ttgccctatg gtagaaattc cacctaaaga tataatggca gaattggagt cagaggatat 240
cttgatccct gaagaatctg taattcagga ggaaattgca gaagaggtag agactagtat 300
ctgtgaatgc caggatgaaa atcataagac aatacctgaa ttttctgagg aggctgaaag 360
tctaaccaat tctcatgaag aaccccaaat agcacctcct gaagataact tggaatcctg 420
tgttatgatg aatgatgttt tagaaacttt gcctcatatt gaagttaaga tagaagggaa 480
gtcagaatca ccccaggaag aaatgacagt tgttatcgat cagttagaag tctgtgactc 540
tcttattcct tccacttcat ctatgactca tgtcag 576

<210> 287
<211> 514
<212> DNA
<213> Homo sapiens

<400> 287
gaattcggca cgaggcagag aggtttgcca aagagcgcag gctgagaata tggagagact 60
atgtggctcc cacagctaat ttggaccaaa aggacaagca gtttgttgcc aaggtgatgc 120
aggttctgaa tgctgatgcc attgttgtga agctgaactc aggcgattac aagacgattc 180
acctgtccag catccgacca ccgaggctgg aggggggagaa cacccaggat aagaacaaga 240
aactgcgtcc cctgtatgac attccttaca tgtttgaggc ccgggaattt cttcgaaaaa 300
agcttattgg gaagaaggtc aatgtgacgg tggactacat tagaccagcc agcccagcca 360
cagagacagt gcctgccttt tcagagcgta cctgtgccac tgtcaccatt ggaggaataa 420
acattgctga ggctcttgtc agcaaaggtc tagccacagt gatcagatac cggcaggatg 480
atgaccagag atcatcacac tacgatgaac tgct 514

<210> 288
<211> 456
<212> DNA
<213> Homo sapiens

<400> 288
gaattcggca cgagggggcg ggcaggcggg caggccggca ggcgggtgcg cggagggctg 60
gtgccccgca gcaggtgggc ggggtgcggt tggcggcggc ggctgggccg ggggctgccg 120
gctgcgctcg ggccgtgcgc ggcggccgtg cgggcacgcc atggacttca acatgaagaa 180
gctggcgtcg gacgcgggca tcttcttcac ccgggcggtg cagttcacgg aggagaaatt 240
tggccaggct gagaagactg agcttgatgc ccactttgaa aaccttctgg cccgggcaga 300
cagcaccaag aactggacag agaagatctt gaggcagaca gaggtgctgc tgcagcccaa 360
ccccagtgcc cgagtggagg agttcctgta tgagaagctg gacaggaagg tcccctcaag 420
ggtcaccaac ggggagctgc tggctcagta catggc 456

<210> 289
<211> 262
<212> DNA
<213> Homo sapiens

<400> 289
gaattcggca cgaggcagaa gccccctagct cctctgagcc tcatggggcc agaggaagca 60
gtagttcggg cggcaagaaa tgctacaagc tggagaatga gaagctgttc gaagagttcc 120
ttgaactttg taagatgcag acagcagacc accctgaggt ggtcccattc ctctataacc 180

ggcagcaacg tgcccactct ctgttttttgg cctcggcgga gttctgcaac atcctctcta 240
gggtcctgtc tcgggcccgg ac 262

<210> 290
<211> 205
<212> DNA
<213> Homo sapiens

<400> 290
gaattcggca cgaggattta tgggccactg cacatgcccg ctgcagccct gggatcagct 60
ggaagctgcc tgtcatctcc tgcccaatcc ccagaaaccc tgattcaggt ctgcaggctc 120
ctgcgggctc accaggctgc tggctccggt accatgtaaa cctaggaagg taaaggagca 180
ggcaacctcc tcgtggcctg tgtgt 205

<210> 291
<211> 483
<212> DNA
<213> Homo sapiens

<400> 291
gaattcggca cgaggcctgg ccgggaccgt gtgggccgtg aggatgagga cggctgggag 60
acgcgagggg accgcaaggc ccggaagccc ctggtggaga agaagcggcg cgcgcggatc 120
aacgagagcc tgcaggagct gcggctgctg ctggcggggcg ccgaggtgca ggccaagctg 180
gagaacgccg aagtgctgga gctgacggtg cggcgggtcc agggtgtgct gcggggccgg 240
gcgcgcgagc gcgagcagct gcaggcggaa gcgagcgaac gcttcgctgc cggctacatc 300
cagtgcatgc acgaggtgca cacgttcgtg tccacgtgcc aggccatcga cgctaccgtt 360
ctgccgagct cctgaaccat ctgctcgagt ccatgccgct gcgtgagggc agcaacttca 420
ggatctgctg ggggacgccc tgcggggcca cctaaatccc ctggacggaa tggctggctg 480
cgg 483

<210> 292
<211> 562
<212> DNA
<213> Homo sapiens

<400> 292
gaattcggca cgagggcgct gcgggtagga gccgggttgc gggagacccc aggttcggtt 60
gggattccca gccagaacgg agcttaagcc gggcaggcga gcgaatgacg gagtagcgag 120
ctgcacggcg gcgtgctgcg ctgttgagga cgctgtcccg cgcgctccca ggccgccccg 180
aggcttgggg tcttcgaagg ataatcggcg cccggggccg aacagcgggg gcacacgggg 240
cgctgccgaa gtgcaaggcc acggccagag ctcgagcccg acgcgctgtc tggagtcgta 300
ggttggcgcc gtttgggggtc ggggtctgag gcttgggcgc tgcctgggcc gagcggagat 360
cggggtttgc ctcccgtccc cgctcaggac cctgacgtgg ctgaagcggc cccgggagca 420
tgagcggcag cgcgtggacg tcaaggtggt gatgctgggc aaggagtacg tgggcaagac 480
tagcctggtg gagcgctacg tgcacgaccg ctttctggtg gggccttatc agaacaccat 540
cggggccgcc ttcgtggcca ag 562

<210> 293
<211> 645
<212> DNA
<213> Homo sapiens

<400> 293
gaattcggca cgaggctgag agagagcaca gcctggtggg ttctggggtc tacggcctag 60

```
gggccgggga agtttgcgcc gccgcgacca gtgctgcgat cccgagccgg gctccagccc 120
cgaggaccag gggtcgggcg ggcctgccta cggaaccccg cgggccagca gcagtcgtct 180
cgcgtcctcc tgcttggaaa agtgtttaag cttctaaaat gtcatctatc aagcacctgg 240
tttatgcagt tattcgtttc ttacgggaac aaagtcagat ggacacttac acctcggatg 300
aacaagaaag tttggaagtt gcaattcagt gcttggagac agtttttaag atcagcccag 360
aagatacaca cctagcagtt tcacagcctt tgacagaaat gtttaccagt tccttctgta 420
agaatgacgt tctgcccctt tcaaactcag tgcctgaaga tgtgggaaaa gctgaccaat 480
taaaagatga aggcaataac cacatgaaag aagaaaatta tgctgctgca gtggattgtt 540
acacacaggc aatagaattg gatcccaata atgcagttta ctattgcaac agggctgctg 600
ctcagagcaa attaggtcac tacacagatg cgataaagga ttgtg            645
```

<210> 294
<211> 521
<212> DNA
<213> Homo sapiens

<400> 294
```
ctgagcgtct ctgcttagcc gcggtcatga gccggcacag ccggctgcag aggcaggttc 60
tgagcctgta ccgcgatctg ctgcgcgccg ggcgtgggaa gccgggcgcc gaggcgcgag 120
tgcgggcaga gttccggcag catgcgggcc tgccgcggtc cgacgtgctg cgcatcgagt 180
acctgtaccg ccgcgggcgg cgccagctgc agctgctacg ctcgggccac gccaccgcca 240
tgggcgcctt cgtacgcccg cgggccccga ccggggagcc tggcggcgtg ggttcccagc 300
ctgacgacgg cgacagtcca aggaaccccc acgacagcac ggggggcaccg gagacccgcc 360
ccgacggacg gtgacaggcg aagagccgaa ctcgctcgat ggcgtggtgg agccaggagg 420
ctcgcctgac tgcatggggg gactggggaa cccgcctaag gtgagaggtc ttaagagact 480
agcttgacga attggggatg tcagagactc ctccttggcg a            521
```

<210> 295
<211> 375
<212> DNA
<213> Homo sapiens

<400> 295
```
gaattcggca cgaggagaac atgcagtcta ggaaccggca tgcgcataac ctcaggatat 60
aaataatgct gaagcagagt tacgtttttt ttgttgttgt ttttttttgtt tttgtttttt 120
taggtttccg tgtgtttcta ttgagctgct cagtgcccgg cttagaagac caggaaaagg 180
agtcacaggt cgtatgctgg aggcttgagc cgcggcaccg tggcgcggct cgcctcgctg 240
cggttggtgg tggcggtgga cattgcagcg cggctggagg gggtccttag acaaggtgca 300
agacaaacag aagagggcat gtggggtcaa actcctactg cctgcctgat tttctgccac 360
aggacaaatt cacca            375
```

<210> 296
<211> 628
<212> DNA
<213> Homo sapiens

<400> 296
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gaattcggca cgaggaaaat ggttcgctat tcacttgacc cggagaaccc cacgaaatca 60
tgcaaatcaa gaggttccaa tcttcgtgtt cactttaaga acactcgtga aactgctcag 120
gccatcaagg gtatgcatat acgaaaagcc acgaagtatc tgaaagatgt cactttacag 180
aaacagtgtg taccattccg acgttacaat ggtggagttg gcaggtgtgc gcaggccaag 240
caatgggct ggacacaagg tcggtggccc aaaaagagtg ctgaattttt gctgcacatg 300
cttaaaaacg cagagagtaa tgctgaactt aagggtttag atgtagattc tctggtcatt 360
gagcatatcc aagtgaacaa agcacctaag atgcgccgcc ggacctacag agctcatggt 420
```

```
cggattaacc catacatgag ctctccctgc cacattgaga tgatccttac ggaaaaggaa 480
cagattgttc ctaaaccaga agaggaggtt gcccagaaga aaaagatatc ccagaagaaa 540
ctgaagaaac caaaacttat ggcacgggag taaattctca ttaaaataaa tgtaattaaa 600
aggaaaaaaa aaaaaaaaaa aactcgag                                    628
```

<210> 297
<211> 645
<212> DNA
<213> Homo sapiens

<400> 297
```
gaattcggca cgaggagaaa acgaagcagc gttggaaaat ggaattaaaa atgaggaaaa 60
cacagaacca ggtgctgaat cttctgagaa cgctgatgat cccaacaaag atacaagtga 120
aaacgcagat ggtcaaagtg atgagaacaa ggacgactat acaatcccag atgagtatag 180
aattggacca tatcagccca atgttcctgt tggtatagac tatgtgatac ctaaaacagg 240
gttttactgt aagctgtgtt cactctttta tacaaatgaa gaagttgcaa agaatactca 300
ttgcagcagc cttcctcatt atcagaaatt aaagaaattt ctgaataaat tggcagaaga 360
acgcagacag aagaaggaaa cttaagatgt gcaaggagat ttaatgattt caaagaaaat 420
aatggttctt tgtttttaat gttaaccttt tttaaataca atactgatag ttagaagaaa 480
actattgtac tcttttgttt tagtggagaa ataatagatg tctgttcatg tgttaagtgt 540
tatagcaaaa aaaatacaca tatggttaag ttaatgaata gttttgtttt tatcagaatg 600
gcaacagaca gaagtacttt gtagagattg acttcctaag ctctt                645
```

<210> 298
<211> 625
<212> DNA
<213> Homo sapiens

<400> 298
```
gaattcggca cgaggggatt cagcagcctc cccttgagc cccctcgctt cccgacgttc 60
cgttcccccc tgcccgcctt ctcccgccac cgccgccgcc gccttccgca ggccgtttcc 120
accgaggaaa aggaatcgta tcgtatgtcc gctatccaga acctccactc tttcgacccc 180
tttgctgatg caagtaaggg tgatgacctg cttcctgctg gcactgagga ttatatccat 240
ataagaattc aacagagaaa cggcaggaag accctacta ctgtccaagg gatcgctgat 300
gattacgata aaaagaaact agtgaaggcg tttaagaaaa agtttgcctg caatggtact 360
gtaattgagc atccggaata tggagaagta attcagctac agggtgacca acgcaagaac 420
atatgccagt cctcgtaga gattggactg gctaaggacg atcagctgaa ggttcatggg 480
tttttaagtgc ttgtggctca ctgaagctta agtgaggatt tccttgcaat gagtagaatt 540
tcccttctct tccttgtcac aggtttaaaa acctcacagc ttgtataatg taaccatttg 600
gggtccgctt ttaacttgga ctagt                                       625
```

<210> 299
<211> 545
<212> DNA
<213> Homo sapiens

<400> 299
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gaattcggca cgagggagcc caggaggtca aggctacagt gagccgtgat catgccactg 60
cactccagcc tgggtgacag agcgagaccc tgtctcttaa caacaaaacc catgagcggc 120
agcccccag tcctggatgg tggtaaagaa tcctcaagat caaacccacg cagtgctgag 180
agcttggcct gattctaggg ctgggctgg agaaactgct agagatgatg ccgatagcca 240
gtgtgatccc cctgccctga tggtcaaggg cagagtgcag actggaaccc tcccctcccc 300
aaagattcag acctgtgggg ctgagtgggc tcatagtgtc cccaagtcct gagaggctgg 360
tgtctggctt cagcctccag cttctcaggt tctgatgcag tcagctgagt tccctgccta 420
```

```
ttcttgcaag cactaggagg aagggtggtg ggttgctggg aacagcaccg agcgccctcc 480
ccacccagat tcacagagca cactccccgg ggggatactt taatccggag gccgtgacgc 540
ctgct                                                            545
```

<210> 300
<211> 605
<212> DNA
<213> Homo sapiens

<400> 300
```
gaattgggca cgaggcgggc cgcagctttt cggttcacag cgggcaggga aagccgcggg 60
aagggtactc caggcgagag gcggacgcga gtcgtcgtgg caggaaaagt gactagctcc 120
ccttcgttgt cagccaggga cgagaacaca gccacgctcc cacccggctg ccaacgatcc 180
ctcggcggcg atgtcggccg ccggtgcccg aggcctgcgg gccacctacc accggctcct 240
cgataaagtg gagctgatgc tgcccgagaa attgaggccg ttgtacaacc atccagcagg 300
tcccagaaca gtttttttct gggctccaat tatgaaatgg gggttggtgt gtgctggatt 360
ggctgatatg gccagacctg cagaaaaact tagcacagct caatctgctg ttttgatggc 420
tacagggttt atttggtcaa gatactcact tgtaattatt ccaaaaaatt ggagtctgtt 480
tgctgttaat ttctttgtgg gggcagcagg agcctctcag ctttttcgta tttggagata 540
taaccaagac taaaagctaa agcacacaaa taaaagagtt ctgatcacct gaacaatcta 600
gatgt                                                            605
```

<210> 301
<211> 364
<212> DNA
<213> Homo sapiens

<400> 301
```
gaattcggca cgaggcgcac acgagaacat gcctctcgca aaggatctcc ttcatccctc 60
tccagaagag gagaagagga aacacaagaa gaaacgcctg gtgcagagcc ccaattccta 120
cttcatggat gtgaaatgcc caggatgcta taaaatcacc acggtcttta gccatgcaca 180
aacggtagtt ttgtgtgttg gctgctccac tgtcctctgc cagcctacag gaggaaaagc 240
aaggcttaca gaaggatgtt ccttcaggag gaagcagcac taaaagcact ctgagtcaag 300
atgagtggga aaccatctca ataaacacat tttggataaa aaaaaaaaa aaaaaaaact 360
cgag                                                             364
```

<210> 302
<211> 545
<212> DNA
<213> Homo sapiens

<400> 302
```
gaattccggc acgaggggac cccagagagc cctgagcagc cccaccgccg ccgccggcct 60
agttaccatc acaccccggg aggagccgca gctgccgcag ccggccccag tcaccatcac 120
cgcaaccatg agcagcgagg ccgagaccca gcagccgccc gccgcccccc ccgccgcccc 180
cgccctcagc gccgccgaca ccaagcccgg cactacgggc agcggcgcag ggagcggtgg 240
cccgggcggc ctcacatcgg cggcgcctgc cggcggggac aagaaggtca tcgcaacgaa 300
ggttttggga acagtaaaat ggttcaatgt aaggaacgga tatggtttca tcaacaggaa 360
tgacaccaag gaagatgtat ttgtacacca gactgccata aagaagaata accccaggaa 420
gtaccttcgc agtgtaggag atggagagac tgtggagttt gatgttgttg aaggagaaaa 480
gggtgcggag gcagcaaatg ttacaggtcc tggtggtgtt ccagttcaag gcagtaaata 540
tgcag                                                            545
```

<210> 303

<211> 506
<212> DNA
<213> Homo sapiens

<400> 303
gaattcggca cgaggctggt cactccgcca ccgtagaatc gcctaccatt tggtgcaagc 60
aaaaagcaat cagcaattgg acaggaaaag aatggcattg aagcagattt ccagcaacaa 120
gtgctttggg ggattgcaga aagttttga acatgacagt gttgaactaa actgcaaaat 180
gaaatttgct gtctacttac caccaaaggc agaaacagga aagtgccctg cactgtattg 240
gctctcaggt ttaacttgca cagagcaaaa ttttatatca aaatctggtt atcatcagtc 300
tgcttcagaa catggtcttg ttgtcattgc tccagatacc agccctcgtg gctgcaatat 360
taaaggtgaa gatgagagct gggactttgg cactggtgct ggattttatg ttgatgccac 420
tgaagatcct tggaaaacca actacagaat gtactcttat gtcacagagg agcttcccca 480
actcataaat gccaattttc cagtgg 506

<210> 304
<211> 485
<212> DNA
<213> Homo sapiens

<400> 304
gaattcggca cgagggagtt gtgggcccag gagccctgcg gctgccggca ggtgaactga 60
gtgcccgaca gctgagaccg gcgcccaccc gtcctgagca tagctctgta ggcagtgcgg 120
gcatagcctg catagtgtcc tggcgctggg agttccccgt ggacagagcc agagggcagt 180
ggcgctccct gtcagagctg gatcaggccc cccatcgagg agggagggca gacggaggcc 240
cgagagcctc cccaggcctc ttcgtgggaa ggccccagta ccactcgtag gaggtctcag 300
ctctggcatg gctgccccgg atgtggccga gggggcttca ccctgtgtcc ttaggagggg 360
gtggccttga ggcaagagcc gtgcctcact gaccccagg ggcctcatcc tccccatgga 420
atgggctgta tgtcctgccc caacttggcc cgcagcaggc cagaccccccc tacccccgcc 480
cagag 485

<210> 305
<211> 615
<212> DNA
<213> Homo sapiens

<400> 305
gaattcggca cgaggcttac aaggaaaatg ctgacttatg accggcgctc tgagcctcag 60
gttggggagc gagtgccata cgtcatcatt tatgggaccc ccggagtacc acttatccag 120
cttgtaaggc gcccagtgga agtcctgcag gacccaactc tgagactgaa tgctacttac 180
tatattacca agcaaatcct tccaccctg gcaagaatct tctcacttat tggtattgat 240
gtcttcagct ggtatcatga attaccaagg atccataaag ctaccagctc ctcgcgaagt 300
gaacctgaag ggcggaaagg cactatttca caatatttta ctaccttaca ctgtcctgtg 360
tgtgatgacc taactcagca tggcatctgt agtaaatgtc ggagccaacc tcagcatgtt 420
gcagtcatcc tcaaccaaga aatccgggag ttggaacgtc aacaggagca acttgtaaag 480
atatgcaaga actgtacagg ttgctttgat cgacacatcc catgtgtttc tctgaactgc 540
ccagtacttt tcaaactctt ccgagtaaat agagaattgt ccaaggcacc atatcttcgg 600
cagttattaa accag 615

<210> 306
<211> 504
<212> DNA
<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (1)...(504)
<223> n = A,T,C or G

<400> 306
gaattcggca cnaggccaaa acctgtttgg gaagcatatt acagaaatga tttcaagtac 60
cctgtattct ggatgctaaa aaacaaaaac aaacaaaaaa acaaaaacaa aaaaacaaaa 120
ccagaatcag gtaaaacagc tatgtgatta aaatatttta attcttcagc aattacccgg 180
ttttctaaat tgaatcatgc atctatttat aattctaatt attttgtaaa agaagacaaa 240
attatgaatc ttaagtattt gctccatctt tttctctgta atggtggaga ggctgcccat 300
aattcatctc cacatggagc caagtttaat gtttctagtt cacattttgt acttctgtca 360
tgcttatttc aaactccctg agtgatgggt aagaaatcaa acattgcctc agtggtatca 420
agagaacttt ggtggtggtt tcttcagaat catgaagttc ttttgccaga taaatatttt 480
gatattattt tccttttttaa tata                                       504


<210> 307
<211> 449
<212> DNA
<213> Homo sapiens

<400> 307
gaattcggca cgaggtttaa accctgcgtg gcaatccctg acgcaccgcc gtgatgccca 60
gggaagacag ggcgacctgg aagtccaact acttccttaa gatcatccaa ctattggatg 120
attatccgaa atgtttcatt gtgggagcag acaatgtggg ctccaagcag atgcagcaga 180
tccgcatgtc ccttcgcggg aaggctgtgg tgctgatggg caagaacacc atgatgcgca 240
aggccatccg agggcacctg gaaaacaacc cagctctgga gaaactgctg cctcatatcc 300
gggggaatgt gggctttgtg ttcaccaagg aggacctcac tgagatcagg gacatgttgc 360
tggccaataa ggtgccagct gctgccgtgc tggtgccatt gccccatgtg aagtcactgt 420
gccagcccag aacactggtc tcgggcccg                                   449


<210> 308
<211> 524
<212> DNA
<213> Homo sapiens

<400> 308
gaattcggca cgagggttga ttatggcaag aagtccaagc tggagttctc catttaccca 60
gcaccccagg tttccacagc tgtagttgag ccctacaact ccatcctcac cacccacacc 120
accctggagc actctgattg tgccttcatg gtagacaatg aggccatcta tgacatctgt 180
cgtagaaacc tcgatatcga gcgcccaacc tacactaacc ttaaccgcct tattagccag 240
attgtgtcct ccatcactgc ttccctgaga tttgatggag ccctgaatgt tgacctgaca 300
gaattccaga ccaacctggt gccctacccc cgcatccact ccctctggc cacatatgcc 360
cctgtcatct ctgctgagaa agcctaccat gaacagcttt ctgtagcaga gatcaccaat 420
gcttgctttg agccagccaa ccagatggtg aaatgtgacc ctcgccatgg taaatacatg 480
gcttgctgcc tgttgtaccg tggtgacgtg gttcccaaag atgt                  524


<210> 309
<211> 524
<212> DNA
<213> Homo sapiens

<400> 309
gaattcggca cgagggcttc tcactgagtg cctactttta tgtcctgcct gtggtgagca 60
```

```
caaatgttga gcacatcaat ccccattttg tagacgaaga gacagagttg agtgacttgc 120
ccaaagacac agggccagtg aggagttgtg caggtttgcc ctggcattaa aataataaac 180
attgaaattc agtcgattcc cctatggact cagttataga tctcatcagt tgaaggaaga 240
gagatgcctt ttcctattca gccttttttgc aatccttcca tctagaggag atgtatctta 300
taatatcctc aaaggcactc tgttgctaat agcagccttg atgaggtccc atatagctca 360
ttggaagcag agctagtctt ggaaactgaa aatgttggac cagagtctgc ccattccttt 420
agctctgggt ccagctgtgg tctggggtgg aatggagtct gaccttgcct cacacagggc 480
ctgtctgttc tcattgtggc catccacatc ctggagctgc tcat 524
```

```
<210> 310
<211> 524
<212> DNA
<213> Homo sapiens
```

```
<400> 310
gaattcggca cgagggagga ctacaaggat aggcccagga gtaatggagt ccaaagagaa 60
acgagcagta aacagtctca gcatggaaaa tgccaaccaa gaaaatgaag aaaaggagca 120
agttgctaat aaaggggagc ccttggccct cccttttggat gctggtgaat actgtgtgcc 180
tagaggaaat cgtaggcggt tccgcgttag gcagcccatc ctgcagtata gatgggatat 240
gatgcatagg cttggagaac cacaggcaag gatgagagaa gagaatatgg aaaggattgg 300
ggaggaggtg agacagctga tggaaaagct gagggaaaag cagttgagtc atagtctgcg 360
ggcagtcagc actgaccccc ctcaccatga ccatcatgat gagttttgcc ttatgccctg 420
aatcctgatg gtttccctaa agttattacg gaaacagacc cctgctttcg aatttacatg 480
ttcatgatgt gcccttgttg taaaccttta cctgtcactt gttt 524
```

```
<210> 311
<211> 523
<212> DNA
<213> Homo sapiens
```

```
<400> 311
gaattcggca cgaggcctcg tgccgtgccc cccgaggtat gcggggtcac tcgctgctcg 60
atgttccctc cgaagggtcg dacaaggctc cggagccctg tagctgccct ccctaggagc 120
cccgggtctt cactggccga ggtgcccacc ccgcagcatt ctgggagtgg tagttttctt 180
ccttcaggtt cattcctggc tggccagtgc ccaagactgg cgagactacg attcccagac 240
gcccaagcga gtcgccggtc acgtggccgc aaggacgctg ggccggtggg cggggggccgg 300
caggtgctcc gcagccgtct gtgccaccca gagccggcgg gccgctaggt ccccggagac 360
cctgctatgg tgcgtgcggg cgccgtgggg gctcatctcc ccgcgtccgg cttggatatc 420
ttcggggacc tgaagaagat gaacaagcgc cagctctatt accaggtttt aaacttcgcc 480
atgatcgtgt cttctgcact catgatatgg aaaggcttga tcg 523
```

```
<210> 312
<211> 524
<212> DNA
<213> Homo sapiens
```

```
<400> 312
gaattcggca cgagggtgaa ggtgtgtgtc agcttttgcg tcactcgagc cctgggcgct 60
gcttgctaaa gagccgagca cgcgggtctg tcatcatgtc gcgttacggg cggtacggag 120
gagaaaccaa ggtgtatgtt ggtaacctgg gaactggcgc tggcaaagga gagttagaaa 180
gggctttcag ttattatggt cctttaagaa ctgtatggat tgcgagaaat cctccaggat 240
ttgcctttgt ggaattcgaa gatcctagag atgcagaaga tgcagtacga ggactggatg 300
gaaaggtgat ttgtggctcc cgagtgaggg ttgaactatc gacaggcatg cctcggagat 360
cacgtttтga tagaccacct gcccgacgtc cctttgatcc aaatgataga tgctatgagt 420
```

```
gtggcgaaaa gggacattat gcttatgatt gtcatcgtta cagccggcga agaagaagca 480
ggtcacggtc tagatcacat tctcgatcca gaggaaggcg atac           524
```

<210> 313
<211> 523
<212> DNA
<213> Homo sapiens

<400> 313
```
gaattcggca cgaggggtaa caccagaata tttggcaaag ggagaaaaaa aaagcagcga 60
ggcttcgcct tcccctctc cctttttttt tcctcctctt ccttcctcct ccagccgccg 120
ccgaatcatg tcgatgagtc caaagcacac gactccgttc tcagtgtctg acatcttgag 180
tcccctggag gaaagctaca agaaagtggg catggagggc ggcggcctcg gggctccgct 240
ggcggcgtac aggcagggcc aggcggcacc gccaacagcg gccatgcagc agcacgccgt 300
ggggcaccac ggcgccgtca ccgccgccta ccacatgacg gcggcggggg tgccccagct 360
ctcgcactcc gccgtggggg gctactgcaa cggcaacctg ggcaacatga gcgagctgcc 420
gccgtaccag gacaccatga ggaacagcgc ctctggcccc ggatggtacg gcgccaaccc 480
agacccgcgc ttccccgcca gttctttttc ttcaggatca ggc           523
```

<210> 314
<211> 525
<212> DNA
<213> Homo sapiens

<400> 314
```
gaattcggca cgagggaaaa ccagagatag agggaaagcc agagagtgaa ggagagccag 60
ggagtgaaac aagggctgca ggaaagcgcc cagctgagga tgatgtaccc aggaaagcca 120
aaagaaaaac taataagggg ctggctcatt acctcaagga gtataaagag gccatacatg 180
atatgaattt cagcaatgag gacatgataa gagaatttga caatatggct aaggtgcagg 240
atgagaagag aaaaagcaaa cagaaattgg gggcgttttt gtggatgcaa agaaatttac 300
aggacccctt ctaccctaga ggtccaaggg aattcagggg tggctgcagg gccccacgaa 360
gggacattga agacattcct tatgtgtagt gtccctggca ggcatttacc aggccatgtg 420
ctttaacgtt cggtaatact ttactttagg catccctcct gttgctagca gccttttgac 480
ctatctgcaa tgcagtgttc tcagtaggaa atgttcatct gttac           525
```

<210> 315
<211> 358
<212> DNA
<213> Homo sapiens

<400> 315
```
gaattcggca cgagggggtg gtggagcgct gggcggccag gctccctggc tggccggttt 60
gggcgtctgg gccgtgaagg tgggacctcc tgttccgggc cgcaagtttc cctctccagc 120
cgcccgccgt tcgtagcatg tcccccagaa ctcggggagc gcaggcagga caggcttaga 180
gaagacgcgg tccccagcgc ttgggccacg gacgtcccac cccgctcctc tgtcgctgga 240
gaaccgccgg gccgagccac tgggagaagc aggccagagc cttccagggc ctccggcccg 300
tggacccgag gaggatgagc tggctttttc ccctgaccaa gagcgcctcc tcctccgc 358
```

<210> 316
<211> 420
<212> DNA
<213> Homo sapiens

<400> 316

```
gaattcggca cgaggcgttc cttcgcacac tgtgattttg ccctcctgcc cacgcagacc 60
tgcagcgggc aaagagctcc cgaggaagca cagcttgggt caggttcttg cctttcttaa 120
ttttagggac agctaccgga aggaggggaa caaggagttc tcttccgcag cccctttccc 180
cacgcccacc cccagtctcc agggaccctt gcctgcctcc taggctggaa gccatggtcc 240
cgaagtgtag ggcaagggtg cctcaggacc ttttggtctt cagcctccct cagcccccag 300
gatctgggtt aggtggccgt cctcctgctc ctcatgggaa gatgtctcag agccttcatg 360
acctcccctc cccaacccaa tgccaaagtg gacttgggag ctgcacaaag tcagcaggga 420
```

<210> 317
<211> 518
<212> DNA
<213> Homo sapiens

<400> 317
```
gaattcggca cgaggctgc cggagggtcg tttttaaaggg cccgcgcgtt gccgccccct 60
cggcccgcca tgctgctatc cgtgccgctg ctgctcggcc tcctcggcct ggccgtcgcc 120
gagcctgccg tctacttcaa ggagcagttt ctggacggag acgggtggac ttcccgctgg 180
atcgaatcca aacacaagtc agattttggc aaattcgttc tcagttccgg caagttctac 240
ggtgacgagg agaaagataa aggtttgcag acaagccagg atgcacgctt ttatgctctg 300
tcggccagtt tcgagccttt cagcaacaaa ggccagacgc tggtggtgca gttcacggtg 360
aaacatgagc agaacatcga ctgtgggggc ggctatgtga agctgtttcc taatagtttg 420
gaccagacag acatgcacgg agactcagaa tacaacatca tgtttggtcc cgacatctgt 480
ggcctgcacc aaaaagggtc atgtcatctt caactaca 518
```

<210> 318
<211> 401
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(401)
<223> n = A,T,C or G

<400> 318
```
aacaccaagg tggacaagag agttgagtcc aaatatggtc ccccatgccc atcatgccca 60
gcacctgagt tcctgggggg accatcagtc ttcctgttcc ccccaaaacc caaggacact 120
ctcatgatct cccggacccc tgaggtcacg tgcgtggtgg tggacgtgag ccaggaagac 180
cccgaggtcc agttcaactg gtacgtggat ggcgtggagg tgcataatgc caagacaaag 240
ccgcgggagg agcagttcaa cagcacgtac cgtgtggtca gcgtcctcac cgtcctgcac 300
caggactggc tgaacggcaa ggagtacaag tgcaaggtct ccaacaaagg cctcccgtcc 360
tccatcgaga aaaccatntn caaagccaaa gggcagcccc g 401
```

<210> 319
<211> 401
<212> DNA
<213> Homo sapiens

<400> 319
```
accgtgtact attagccatg gtcaaccca ccgtgttctt cgacattgcc gtcgacggcg 60
agcccttggg ccgcgtctcc tttgagctgt tgcagacaa ggtcccaaag acagcagaaa 120
attttcgtgc tctgagcact ggagagaaag gatttggtta taagggttcc tgctttcaca 180
gaattattcc agggtttatg tgtcagggtg gtgacttcac acgccataat ggcactggtg 240
```

gcaagtccat ctatgggggag aaatttgaaag atgagaactt catcctaaag catacgggtc 300
ctgcatcttg tccatggcaa atgctggacc caacacaaat ggttcccagt ttttcatctg 360
cactgccaag actgagtggt tggatggcaa gcatgtggtg t   401

<210> 320
<211> 471
<212> DNA
<213> Homo sapiens

<400> 320
tagagtccca caaacccttg gcatgcctta atgtttgaga attccattct atttctcatt 60
aatctcttga aagcaaagat attttataaa tcttttttgga ccagtgtttt agatggtagt 120
ggctgtggca gtgactttta attagccatc ctgaacccat catttaaaat atttatttt 180
gctttcagaa attttgaaat aagtaaggga aaaaaccaaa ttatttacag atacacataa 240
ccaacccaaa ataaaagcaa aatactaaat taggcacaca gaaagactaa aagtaaattc 300
actaggaaag acactcctca aagatagaat gtaaattttg tgaatccaga gtgctcaaac 360
cagaataacg cttgtcctta taccctaaag gacttgccaa gaaagataaa aagtattta 420
ttatcccaga aagaatgcaa gggtcttcat ttcagttggc ttataacacc a   471

<210> 321
<211> 471
<212> DNA
<213> Homo sapiens

<400> 321
attactcaac agatttggac acaacggaaa gacaacagtt gatatttcta cttggtgtga 60
gcagtttgca actttttgtt cagagcaact ggacgggggcc ccctgttgac ttacaccctc 120
aggacttttt gtcatctgtt ttgttccagc aattcagtga ggttaaagga ctggatgcat 180
ttgttctgag cctgctcact ctagatggtg aatcaatcta cagcctgacc tcgaagccta 240
tactactgtt attagcacgc attatcctag tgaatgtaag acataaactg acagctattc 300
agagcttgcc atggtggact ttgagatgtg tgaatattca tcagcatttg cttgaggaac 360
gctcacctct gctttttact cttgccgaaa actgtattga tcaagtgatg aaactacaga 420
atctgtttgt agatgattca ggtcgatatt tggctattca attccatctg g   471

<210> 322
<211> 601
<212> DNA
<213> Homo sapiens

<400> 322
tgaaggagca gttgccgccg ttggcggcgg cccgagcagt tttcgctgct gctacggctg 60
ttgccatgag gcgaggctag ggaggacctc acttccccgg ggtgtaataa tgttaactga 120
ggccagtcta tccatatggg gatggggaag ccttggcatt gtccttttc tgataacctt 180
tggacccttt gtaatatttt atttgacatt ttatatcctc tgctttgtgg gtgggggttt 240
agtggttact ctcctgtttg gaaaaacaaa ctcagagaag tacctagaac agtgtgaaca 300
ctcatttctt cctccaacat cacctggggt tcctaagtgc ttagaagaaa tgaaacggga 360
agccaggact attaagattg atagaagatt gacgggtgcc aatataattg atgaacctct 420
ccagcaagtt atccagtttt ccttgaggga ttatgtccag tattggtatt atacactaag 480
cgatgatgaa tcttttcttc ttgaaattag gcagactctt caaaacgcac tcattcagtt 540
tgctactagg tcaaaagaaa tagactggca accttatttt actacacgca ttgtagatga 600
c   601

<210> 323
<211> 601

<212> DNA
<213> Homo sapiens

<400> 323
gatgaggtag cagaggctca acgggcagag tttagccctg cccagttctc tggtcctaag 60
aagatcaacc tgaaccactt gttgaatttc acttttgaac cccgtggcca gacgggtcac 120
tttgaaggca gtggacatgg tagctgggga aagaggaaca agtggggaca taagcctttt 180
aacaaggaac tcttttaca ggccaactgc caatttgtgg tgtctgaaga ccaagactac 240
acagctcatt ttgctgatcc tgatacatta gttaactggg actttgtgga caagtgcgc 300
atttgtagcc atgaagtgcc atcttgccca atatgcctct atccacctac tgcagccaag 360
ataacccgtt gtggacacat cttctgctgg gcatgcatcc tgcactatct ttcactgagt 420
gagaagacgt ggagtaaatg tcccatctgt tacagttctg tgcataagaa ggatctcaag 480
agtgttgttg ccacagagtc acatcagtat gttgttggtg ataccattac gatgcagctg 540
atgaagaagg agaaagggg ggtggtggct ttgcccaaat ccaaatggat gaatgtagac 600
c   601

<210> 324
<211> 461
<212> DNA
<213> Homo sapiens

<400> 324
catcttcttc ctttcgcggg gtcctccgta gttctggcac gagccaggcg tactgacagg 60
tggaccagcg gactggtgga gatggcgacg ctctctctga ccgtgaattc aggagaccct 120
ccgctaggag ctttgctggc agtagaacac gtgaaagacg atgtcagcat ttccgttgaa 180
gaagggaaag agaatattct tcatgtttct gaaaatgtga tattcacaga tgtgaattct 240
atacttcgct acttggctag agttgcaact acagctgggt tatatggctc taatctgatg 300
gaacatactg agattgatca cttggttgga gttcagtgct acaaaattat cttcatgtga 360
ttcctttact tctacaatta atgaactcaa tcattgcctg tctctgagaa catacttagt 420
tggaaactcc ttgagtttag cagatttatg tgtttgggcc a   461

<210> 325
<211> 461
<212> DNA
<213> Homo sapiens

<400> 325
tcactttga accccgtggc cagacgggtc actttgaagg cagtggacat ggtagctggg 60
gaaagaggaa caagtgggga cataagcctt ttaacaagga actcttttta caggccaact 120
gccaatttgt ggtgtctgaa gaccaagact acacagctca ttttgctgat cctgatacat 180
tagttaactg ggactttgtg gaacaagtgc gcatttgtag ccatgaagtg ccatcttgcc 240
caatatgcct ctatccacct actgcagcca agataacccg ttgtggacac atcttctgct 300
gggcatgcat cctgcactat ctttcactga gtgagaagac gtggagtaaa tgtcccatct 360
gttacagttc tgtgcataag aaggatctca agagtgttgt tgccacagag tcacatcagt 420
atgttgttgg tgataccatt acgatgcagc tgatgaagaa g   461

<210> 326
<211> 451
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(451)

<223> n = A,T,C or G

<400> 326
ctgtggaggc cagttctgga gctattgcag cctcggttgc ccggccgggg acccgagccg 60
aaaagttatc gtcagaatgt cgggcaaaga ccgaattgaa atctttccct cgcgaatggc 120
acagaccatc atgaangctc gtttaaaggg agcacagaca ggtcgaaacc tcctgaagaa 180
aaaatctgat gccttaactc ttcgatttcg acagatccta aagaagataa tagagactaa 240
aatgttgatg ggcgaagtga tgagagaagc tgccttttca ctagctgaag ccaagttcac 300
agcaggtgac ttcagcacta cagttatcca aaatgtcaat aaagcgcaag tgaagattcg 360
agcgaagaaa gataatgtag caggtgttac tttgccagta tttgaacatt accatgaagg 420
aactgacagt tatgaactga ctggtttagc c 451

<210> 327
<211> 601
<212> DNA
<213> Homo sapiens

<400> 327
gagggaggc cagcgaagcc gagtaaaacc gccgcccggg agaagactga aggagcagtt 60
gccgccgttg gcggcggccc gagcagtttt cgctgctgct acggctgttg ccatgaggcg 120
aggctaggga ggacctcact tccccggggt gtaataatgt taactgaggc cagtctatcc 180
atatggggat ggggaagcct tggcattgtc cttttctga taacctttgg accctttgta 240
atattttatt tgacatttta tatcctctgc tttgtgggtg ggggtttagt ggttactctc 300
ctgtttggaa aaacaaactc agagaagtac ctagaacagt gtgaacactc atttcttcct 360
ccaacatcac ctggggttcc taagtgctta gaagaaatga aacgggaagc caggactatt 420
aagattgata gaagattgac gggtgccaat ataattgatg aacctctcca gcaagttatc 480
cagttttcct tgagggatta tgtccagtat tggtattata cactaagcga tgatgaatct 540
tttcttcttg aaattaggca gactcttcaa aacgcactca ttcagtttgc tactaggtca 600
a 601

<210> 328
<211> 601
<212> DNA
<213> Homo sapiens

<400> 328
ccggaatgat caccaagaca cacaaagtag accttgggct cccagagaag aaaaagaaga 60
agaaagtggt caaagaacca gagactcgat actcagtttt aaacaatgat gattactttg 120
ctgatgtttc tcctttaaga gctacatccc cctctaagag tgtggcccat gggcaggcac 180
ctgagatgcc tctagtgaag aaaaagaaga agaaaaagaa gggtgtcagc accctttgcg 240
aggagcatgt agaacctgag accacgctgc ctgctagacg gacagagaag tcacccagcc 300
tcaggaagca ggtgtttggc cacttggagt tcctcagtgg ggaaaagaaa aataagaagt 360
cacctctagc catgtcccat gcctctgggg tgaaaacctc cccagaccct agacagggtg 420
aggaggaaac cagagttggc aagaagctca aaaacacaa gaaggaaaaa aagggggccc 480
aggacccac agccttctcg gtccaggacc cttggttctg tgaggccagg gaggccaggg 540
atgttgggga cacttgctca gtggggaaga aggatgagga acaggcagcc ttggggcaga 600
a 601

<210> 329
<211> 501
<212> DNA
<213> Homo sapiens

<400> 329

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agcagctttc gctccaagct gcatcttgta gacctcgctg gatcagaaag acagaagaaa 60
accaaggctg aaggggatcg tctaaaagag ggtattaata ttaaccgagg cctcctatgc 120
ttgggaaatg taatcagtgc tcttggagat gacaaaaagg gtggctttgt gccctacaga 180
gattccaagt tgactcgact gcttcaagat tctctaggag gtaatagcca tactcttatg 240
atagcctgtg tgagtcctgc tgactccaat ctagaggaaa cattaaatac ccttcgctat 300
gctgacagag caagaaaaat caagaacaaa cctattgtta atattgatcc ccagacagct 360
gaacttaatc atctaaagca acaggtacaa cagctacaag tcttgttgct acaggcccat 420
ggaggtaccc tgcctggatc tataactgtg gaaccatcag agaatctaca atccctgatg 480
gagaagaatc agtccctggt a                                        501
```

<210> 330
<211> 451
<212> DNA
<213> Homo sapiens

<400> 330
```
cgcgaggcgc gcgccatgga acagcggtta gctgagtttc gggcggcgcg gaaacgggcg 60
ggtctggcgg cccaacccccc tgctgccagt cagggcgcac aaaccccagg agagaaggcg 120
gaagcagcag cgactctaaa ggcagcccca ggctggctaa agcggttcct ggtatggaaa 180
cctaggcccg cgagtgcccg ggcccagccc ggcctagttc aggaagcggc tcagccccag 240
ggcagcacat cagagacacc atggaacaca gccattcctc tgccgtcgtg ctgggaccag 300
tctttcctga ccaatatcac cttcttgaag gttcttctct ggttggtcct gctgggactg 360
tttgtggaac tggaatttgg cctgcatatt ttgtcctgtc cttgttctat ggatgtacg 420
tcgggacacg aggccctgaa gagaagaaag a                             451
```

<210> 331
<211> 331
<212> DNA
<213> Homo sapiens

<400> 331
```
cgttggtcct gtgcggtcac ttagccaaga tgcctgagga aacccagacc caagaccaac 60
cgatggagga ggaggaggtt gagacgttcg cctttcaggc agaaattgcc cagttgatgt 120
cattgatcat caatactttc tactcgaaca aagagatctt tctgagagag ctcatttcaa 180
attcatcaga tgcattggac aaaatcccgt atgaaagctt ggacagaatc caataaatta 240
aaacttcttg ggaaaagaag cttgcattat taaccccttta taccgaacca aaccaaagaa 300
tccgaaactt cttcacttat ttggtgggga a                             331
```

<210> 332
<211> 401
<212> DNA
<213> Homo sapiens

<400> 332
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tccttcttga tcctgaactg ggttaggtgc cgctgttgct gctcgtgttg aatctagaac 60
cgtagccaga catgggactg gaggacgagc aaaagatgct taccgaatcc ggagatcctg 120
aggaggagga agaggaagag gaggaattag tggatcccct aacaacagtg agagagcaat 180
gcgagcagtt ggagaaatgt gtaaaggccc gggagcggct agagctctgt gatgagcgtg 240
tatcctctcg atcacataca gaagaggatt gcacggagga gctctttgac ttcttgcatg 300
cgagggacca ttgcgtggcc cacaaactct ttaacaactt gaaataaatg tgtggactta 360
attcacccca gtcttcatca tctgggcatc agaatatttc c                  401
```

<210> 333
<211> 331

<212> DNA
<213> Homo sapiens

<400> 333
gatccctgca gaggcctcat cccccgacag cgagccagtc ctagagaagg atgacctcat 60
ggacatggat gcctctcagc agaatttatt tgacaacaag tttgatgaca tctttggcag 120
ttcattcagc agtgatccct tcaatttcaa cagtcaaaat ggtgtgaaca aggatgagaa 180
ggaccactta attgagcgac tatacagaga gatcagtgga ttgaaggcac agctagaaaa 240
catgaagact gagagccagc gggttgtgct gcagctgaag ggccacgtca gcgagctgga 300
agcagatctg gccgagcagc agcacctgcg g 331

<210> 334
<211> 551
<212> DNA
<213> Homo sapiens

<400> 334
agcgggactg gctgggtcgg ctgggctgct ggtgcgagga gccgcggggc tgtgctcggc 60
ggccaagggg acagcgcgtg ggtggccgag gatgctgcgg ggcggtagct ccggcgcccc 120
tagctggtga ctgctgcgcc gtgcctcaca cagccgaggc gggctcggcg cacagtcgct 180
gctccgcgcg cgcgcccggc ggcgctccag gtgctgacag cgcgagagag cgcggccctc 240
aggagcaagg cgaatgtatg acaacatgtc cacaatggtg tacataaagg aagacaagtt 300
ggagaagctt acacaggatg aaattatttc taagacaaag caagtaattc aggggctgga 360
agctttgaag aatgagcaca attccatttt acaaagtttg ctggagacac tgaagtgttt 420
gaagaaagat gatgaaagta atttggtgga ggagaaatca aacatgatcc cggaagtcac 480
tggagatgtt ggagctcggc ctgagtgagg cacaggttat gatggctttg tcaaatcacc 540
tgaatgcttg t 551

<210> 335
<211> 501
<212> DNA
<213> Homo sapiens

<400> 335
caggcggccg agcgggactg gctgggtcgg ctgggctgct ggtgcgagga gccgcggggc 60
tgtgctcggc ggccaagggg acagcgcgtg ggtggccgag gatgctgcgg ggcggtagct 120
ccggcgcccc tagctggtga ctgctgcgcc gtgcctcaca cagccgaggc gggctcggcg 180
cacagtcgct gctccgcgcg cgcgcccggc ggcgctccag gtgctgacag cgcgagagag 240
cgcggccctc aggagcaagg cgaatgtatg acaacatgtc cacaatggtg tacataaagg 300
aagacaagtt ggagaagctt acacaggatg aaattatttc taagacaaag caagtaattc 360
aggggctgga agctttgaag aatgagcaca attccatttt acaaagtttg ctggagacac 420
tgaagtgttt gaagaaagat gatgaaagta atttggtgga ggagaaatca aacatgatcc 480
ggaagtcact ggagatgttg g 501

<210> 336
<211> 521
<212> DNA
<213> Homo sapiens

<400> 336
cctcggcggc ggcggcggtg cttacagcct gagaagagcg tctcgcccgg gagcggcggc 60
ggccatcgag acccacccaa ggcgcgtccc cctcggcctc ccagcgctcc caagccgcag 120
cggccgcgcc ccttcagcta gctcgctcgc tcgctctgct tccctgctgc cggctgcgcc 180
atggcgttgg cgttggcggc gctggcggcg gtcgagccgg cctgcggcag ccggtaccag 240

```
cagttgcaga atgaagaaga gtctggagaa cctgaacagg ctgcaggtga tgctcctcca 300
ccttacagca gcatttctgc agagagcgca gcatattttg actacaagga tgagtctggg 360
tttccaaagc ccccatctta caatgtagct acaacactgc ccagttatga tgaagcggag 420
aggaccaagg ctgaagctac tatccctttg gttcctggga gagatgagga ttttgtgggt 480
cgggatgatt ttgatgatgc tgaccagctg aggataggaa a                    521
```

<210> 337
<211> 521
<212> DNA
<213> Homo sapiens

<400> 337
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aaaggaggaa aatacacgga agagaattgc tgtcctggct gagtccagag agataactga 60
gggtcccaga caaggatcaa gagaacggga ttggcctcca gaggcagagg ttccaaatgg 120
gagtgggctt cctcctagaa agactttctg gaggagaccc ccctactgtg taacagagga 180
ggactttggg attaagaaaa gcattccagg aagccgacag tgtcagcaaa cgtggaggtg 240
agatccttca aagtgagtgg tgtggaggtt ccagaatttt tctgagcctg aagggaaggt 300
tggagagcag accctgccct ttggaggctt gacttagccc tgagggcacc ctgtagccag 360
ggtgggcaga tgccaatatg gtagagacga agactgagta gggagccagc cacagtgctt 420
gtggtctcag gcagggagtg aagaccagag tggagcaggc tagaaacctg ggaaggaagc 480
aggttcccca gtataagccc atgatgtgtg aagaatgagc c                    521
```

<210> 338
<211> 581
<212> DNA
<213> Homo sapiens

<400> 338
```
atactgcttg cttggagatg tcctcggaga ccattcttgc tatgacaagg cctgggagtt 60
gtcccggtac cgcagtgctc gtgctcagcg ctccaaagcc ctccttcatc ttcggaacaa 120
ggagtttcaa gagtgtgtag agtgcttcga acgctcggtt aagattaatc ccatgcagct 180
cggggtgtgg ttttctctcg gttgtgccta tttggccttg gaagactatc aaggttcagc 240
aaaggcattt cagcgctgtg tgactctaga acccgataat gctgaagctt ggaacaattt 300
gtcaacttcc tatatccgat aaaacaaaa agtaaaagct tttagaactt tacaagaagc 360
tctcaagtgt aactatgaac actggcagat ttgggaaaac tacatcctca ccagcactga 420
cgttggggaa ttttcagaag ccattaaagc ttatcaccgg ctcttggact tacgtgacaa 480
atacaaagat gttcaggtcc ttaaaattct agtcagggca gtgattgatg ggatgactga 540
tcgaagtgga gatgttgcaa ctggcctcaa aggaaagctg c                    581
```

<210> 339
<211> 581
<212> DNA
<213> Homo sapiens

<400> 339
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aagaagaaga agctcgcgtt cgtgaagaag cagagagggt ccggcaggaa cgagagaagc 60
atttccagag agaagagcaa gagcgcctgg agagaaagaa gcgacttgag gagattatga 120
aaagaaccag gagaacagaa gctacagata agaaaaccag tgatcagaga aacggtgata 180
tagccaaggg agctctcact ggaggaacag aggtgtctgc acttccatgt acaacaaacg 240
ctccgggaaa tggaaagcca gttggcagcc cacatgtggt tacctcacac cagtcaaaag 300
aaaaaaaaaa gcgtgatgga atagctattg gatcaggtta caaaaaacaa tttttaaaaa 360
taagctaaca tctaagaaac atcattttgc ctatactgcc tcccccaaaa tcctgtttttt 420
actcagtgaa cacctaagcc cactcagaaa tgttctggat tgtcattttc tccatccttt 480
agcaccttct tattttgggg ggagctctga agccttgcaa gaagtgggag agaaaaggac 540
```

```
caggtgtgac agaagggacg atttaagtta ttacaataaa c                581
```

<210> 340
<211> 571
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(571)
<223> n = A,T,C or G

<400> 340
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ggtggcaaat tcaagtcctg ttaaccccgt ggtgttcttt gatgtcagta ttggcggtca 60
ggaagttggc cgcatgaaga tcgagctctt tgcagacgtt gtgcctaaga cggccgagaa 120
ctttaggcag ttctgcaccg gagaattcag gaaagatggg gttccaatag gatacaaagg 180
aagcaccttc cacagggtca taaaggattt catgattcag ggtggagatt ttgttaatgg 240
agatggtact ggagtcgcca gtatttaccg ggggccattt gcagatgaaa attttaaact 300
tagacactca gctccaggcc tgctttccat ggcgaacagt ggtccaagta caaatggctg 360
tcagttcttt atcacctgct ctaagtgcga ttggctggat gggaagcatg tggtgtttgg 420
aaaaatcatc gatggacttc tagtgatgag aaagattgag aatgttccca caggccccaa 480
caataagccc aagctacctg tggtgatctc cagtgtgggg agatgtagtc cagacaaaga 540
ctgaatcagt atacttgctc gacttcaagg n                           571
```

<210> 341
<211> 581
<212> DNA
<213> Homo sapiens

<400> 341
```
taatgagacc aaagtttgca agggcaggac gagcccgtgc taacagagaa agtgttgttt 60
cctcaatttg gttttagact gtcttgtcct atggggagaa aaagatctgc ccttgggaga 120
ggtgccaact ttatagatct attaataaaa gaactggcag gcttacagtt cttgccaatg 180
aggaaacttg aatgagagaa gccaggctca accttggcca acagactgga gcccatcacc 240
ctaacttcac cccgcttctc cttacccaac cgtcaaaggc taggcagcac ccacccagca 300
gcttccacct ggctgaagcc tgcacctgct tcagaccaag ggttagatgg aaatttggca 360
tgggaagaga gggctcacct gtgggcagga tagactctat ccaagaagga gaactgaaaa 420
atgaaaacct atgagacaag gggtgatcct gaagcaggca ggagaaaggg ctggagggag 480
aggcactggg gaattttttcc tggtgaatac tgaagttact agatgttttg tcttgcaaaa 540
ctcaagggaa aactctcaaa ctctaatggt tggcctattc t                581
```

<210> 342
<211> 451
<212> DNA
<213> Homo sapiens

<400> 342
```
gcagaccaga cttcgctcgt actcgtgcgc ctcgcttcgc ttttcctccg caaccatgtc 60
tgacaaaccc gatatggctg agatcgagaa attcgataag tcgaaactga agaagacaga 120
gacgcaagag aaaaatccac tgccttccaa agaaacgatt gaacaggaga agcaagcagg 180
cgaatcgtaa tgaggcgtgc gccgccaata tgcactgtac attccacaag cattgccttc 240
ttattttact tcttttagct gtttaacttt gtaagatgca aagaggttgg atcaagttta 300
aatgactgtg ctgccccttt cacatcaaag aactactgac aacgaagccg cgcctgcctt 360
tcccatctgt ctatctatct ggctggcagg gaaggaaaga acttgcattg ttggtgaagg 420
```

```
aagaagtggg gggtggaaga aatgggggtg g                                451
```

<210> 343
<211> 601
<212> DNA
<213> Homo sapiens

<400> 343
```
tgacctcatg gacatggatg cctctcagca gaatttattt gacaacaagt ttgatgacat 60
ctttggcagt tcattcagca gtgatccctt caatttcaac agtcaaaatg gtgtgaacaa 120
ggatgagaag gaccacttaa ttgagcgact atacagagag atcagtggat tgaaggcaca 180
gctagaaaac atgaagactg agagccagcg ggttgtgctg cagctgaagg gccacgtcag 240
cgagctggaa gcagatctgg ccgagcagca gcacctgcgg cagcaggcgg ccgacgactg 300
tgaattcctg cggcagaac tggacgagct caggaggcag cgggaggaca ccgagaaggc 360
tcagcggagc ctgtctgaga tagaaaggaa agctcaagcc aatgaacagc gatatagcaa 420
gctaaaggag aagtacagcg agctggttca gaaccacgct gacctgctgc ggaagaatgc 480
agaggtgacc aaacaggtgt ccatggccag acaagcccag gtagatttgg aacgagagaa 540
aaaagagctg gagggattcg ttggagccgc tcagtgaccc agggccagcg ggaagactca 600
a                                                                601
```

<210> 344
<211> 571
<212> DNA
<213> Homo sapiens

<400> 344
```
gcgacccggg gagcgagcac gtcgctccgc accgctcttc ctccagccgc tgagccgtcc 60
cttctcgcca tgtcccagag caggcaccgc gccgaggccc cgccgctgga gcgcgaggac 120
agtgggacct tcagtttggg gaagatgata acagctaagc caggggaaaac accgattcag 180
gtattacacg aatacggcat gaagaccaag aacatcccag tttatgaatg tgaaagatct 240
gatgtgcaaa tacacgtgcc cactttcacc ttcagagtaa ccgttggtga cataacctgc 300
acaggtgaag gtacaagtaa gaagctggcg aaacatagag ctgcagaggc tgccataaac 360
attttgaaag ccaatgcaag tatttgcttt gcagttcctg accccttaat gcctgaccct 420
tccaagcaac caaagaacca gcttaatcct attggttcat tacaggaatt ggctattcat 480
catggctgga gacttcctga atataccctt tcccaggaag gaggacctgc tcataagaga 540
gaatatacta caatttgcag gctagagtca t                               571
```

<210> 345
<211> 551
<212> DNA
<213> Homo sapiens

<400> 345
```
gacctggcgc tttgtgcggc tccaggcctc cgagtggact ccagaaagcc tgaaaagcta 60
tcatggcagc aaggcccaag ctccactatc ccaacggaag aggccggatg gagtccgtga 120
gatgggtttt agctgccgcc ggagtcgagt ttgatgaaga atttctggaa acaaaagaac 180
agttgtacaa gttgcaggat ggtaaccacc tgctgttcca acaagtgccc atggttgaaa 240
ttgacgggat gaagttggta cagacccgaa gcattctcca ctacatagca gacaagcaca 300
atctctttgg caagaacctc aaggagagaa ccctgtactg tggcccctct cgagtgttgt 360
cacttgtcag cttactgatg ccttagctga ttagcaacct ctgtagcaca ccacatttac 420
tttatgtctt acatagttag tgagatcagg gaacaaaaac ccaagaaggt cacgaagacc 480
agttggaact tcagtagaga gagtctgagt aaaacaaaag aatagggatt cagatattga 540
atactatatc t                                                     551
```

```
<210> 346
<211> 501
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 346
tatgggaaac tgctctttat ttagaccttt gggacaaaat taactttggt cacatattac 60
ttaaaaaaaa atccagtttt acatatttct aaatagatag aactaaatga tcagagaatt 120
tcttctgtaa aaattggcca aattttatca aaaatctaac atacgataca atccaaatta 180
taaaaagact acttgggatc ataatattcc aaatgtatga cagttataac tccatcttaa 240
caagngtgaa aagtacttgc tctcatgttg ctttggtcca aaagagtaga gctaactcag 300
taacaggcaa ctaagtaccc aatcttttgc caaaattaat ttanattgtg actggcagca 360
gaaatatcca taatgaacag ctctactata acaaagaata attaaagaat acttttcgtg 420
aacatatcac agtatcaaat acatttttat aagagaaaaa tatgaaggaa atgataaaat 480
agctatcaca aacaaaaaga a                                          501


<210> 347
<211> 621
<212> DNA
<213> Homo sapiens

<400> 347
gcccgggaga agactgaagg agcagttgcc gccgttggcg gcggcccgag cagttttcgc 60
tgctgctacg gctgttgcca tgaggcgagg ctagggagga cctcacttcc ccggggtgta 120
ataatgttaa ctgaggccag tctatccata tggggatggg gaagccttgg cattgtcctt 180
tttctgataa cctttggacc ctttgtaata ttttatttga cattttatat cctctgcttt 240
gtgggtgggg gtttagtggt tactctcctg tttggaaaaa caaactcaga gaagtaccta 300
gaacagtgtg aacactcatt tcttcctcca acatcacctg gggttcctaa gtgcttagaa 360
gaaatgaaac gggaagccag gactattaag attgatagaa gattgacggg tgccaatata 420
attgatgaac ctctccagca agtatccag ttttccttga gggattatgt ccagtattgg 480
tattatacac taagcgatga tgaatctttt cttcttgaaa ttaggcagac tcttcaaaac 540
gcactcattc agtttgctac taggtcaaaa gaaatagact ggcaacctta ttttactacc 600
cgcattgtag atgactttgg c                                          621


<210> 348
<211> 511
<212> DNA
<213> Homo sapiens

<400> 348
cggcggccgg cgggcggcga tggcggcggc ggaggccggt ggcgacgacg cccgctgcgt 60
gcggctgagc gccgagcggg cacaggcgct gctggccgac gtggacacgc tgctgttcga 120
ctgcgacggc gtgctgtggc gcggggagac cgccgtgcct ggcgcgcccg aggccctgcg 180
ggcgctgcga gcccgcggca agcgcctggg cttcatcacc aacaacagca gcaagacccg 240
cgctgcctac gccgagaagc tgcggcgcct gggcttcggc ggccccgcgg ggcccggcgc 300
cagcctggag gtcttcggca cggcctactg caccgcgctc tacctgcgcc agcgcctggc 360
cggcgccccc gcgcccaagg cctacgtgct gggcagccca gccctggccg cggagctgga 420
gccgtgggcg tcgccagcgt gggcgtgggg cccgaccact gcaggcgag ggtcccggcg 480
actggctgca cgcccgttgg agccgactgc g                               511
```

<210> 349
<211> 521
<212> DNA
<213> Homo sapiens

<400> 349
gctcaggcgc ctgcggctgg gtgagcgcac gcgaggcggc gaggcggcag cgtgtttcta 60
ggtcgtggcg tcgggcttcc ggagctttgg cggcagctag gggaggatgg cggagtcttc 120
ggataagctc tatcgagtcg agtacgccaa gagcgggcgc gcctcttgca agaaatgcag 180
cgagagcatc cccaaggact cgctccggat ggccatcatg gtgcagtcgc ccatgtttga 240
tggaaaagtc ccacactggt accacttctc ctgcttctgg aaggtgggcc actccatccg 300
gcaccctgac gttgaggtgg atgggttctc tgagcttcgg tgggatgacc agcagaaagt 360
caagaagaca gcggaagctg gaggagtgac aggcaaaggc caggatggaa ttggtagcaa 420
ggcagagaag actctgggtg actttgcagc agagtatgcc aagtccaaca gaagtacgtg 480
caaggggtg tatggagaag aatagaaaaa gggccaggtg c 521

<210> 350
<211> 451
<212> DNA
<213> Homo sapiens

<400> 350
gccggcgggc ggcgatggcg gcggcggagg ccggtggcga cgacgcccgc tgcgtgcggc 60
tgagcgccga gcgggcacag gcgctgctgg ccgacgtgga cacgctgctg ttcgactgcg 120
acggcgtgct gtggcgcggg gagaccgccg tgcctggcgc gcccgaggcc ctgcggcgc 180
tgcgagcccg cggcaagcgc ctgggcttca tcaccaacaa cagcagcaag acccgcgctg 240
cctacgccga gaagctgcgg cgcctgggct tcggcggccc cgcggggccc ggcgccagcc 300
tggaggtctt cggcacggcc tactgcaccg cgctctacct gcgccagcgc ctggccggcg 360
cccccgcgcc caaggcctac gtgctgggca gcccagccct ggccgcggag ctggagccgt 420
gggcgtcgcc agcgtgggcg tggggcccga c 451

<210> 351
<211> 581
<212> DNA
<213> Homo sapiens

<400> 351
agagagagag agagagagag agagagagag agagagacct cgtgccgaat tcggcacgag 60
gcctcgtgcc ggaaacttag tgatggacaa gttggtggtt tcataaatta tcgagatagc 120
aagttaacac gaattctcca gaattccttg ggaggaaatg caaagacacg tattatctgc 180
acaattactc cagtatcttt tgatgaaaca cttactgctc tccagtttgc cagtactgct 240
aaatatatga agaatactcc ttatgttaat gaggtatcaa ctgatgaagc tctcctgaaa 300
aggtatagaa aagaaataat ggatcttaaa aaacaattag aggaggtttc tttagagacg 360
cgggctcagg caatggaaaa agaccaattg gcccactttt ggaagaaaaa gatttgcttc 420
agaaagtaca gaatgagaaa attgaaaact taacacggat gctggtgacc tcttcttccc 480
tcacgttgca ccaggaatta aaggctaaaa gaaaacgaag agttacttgg tgccttgcaa 540
aattaccaaa tgaagaactc aactttcag atcattttat t 581

<210> 352
<211> 461
<212> DNA
<213> Homo sapiens

<400> 352
```
aaaggcgatg aggtggatgg agtggatgaa gtggcgaaga agaaatctaa aaaagaaaaa 60
gacaaggata gtaagcttga aaaagcccta aaggctcaga acgacctgat ctggaacatc 120
aaggacgagc taaagaaagt gtgttcaact aatgacctga aggagctact catcttcaac 180
aagcagcaag tgccttctgg ggagtcggcg atcttggacc gagtagctga tggcatggtg 240
ttcggtgccc tccttccctg cgaggaatgc tcgggtcagc tggtcttcaa gagcgatgcc 300
tattactgca ctggggacgt cactgcctgg accaagtgta tggtcaagac acagacaccc 360
aaccggaagg agtgggtaac cccaaaggaa ttccgagaaa tctcttacct caagaaattg 420
aaggttaaaa agcaggaccg tatattcccc ccagaaccag c                    461
```

<210> 353
<211> 491
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(491)
<223> n = A,T,C or G

<400> 353
```
atggcggcgg cggaggccgg tggcgacgac gcccgctgcg tgcggctgag cgccgagcgg 60
gcacaggcgc tgctggccga cgtggacacg ctgctgttcg actgcgacgg cgtgctgtgg 120
cgcgggggaga ccgccgtgcc tggcgcgccc gaggccctgc gggcgctgcg agcccgcggc 180
aagcgcctgg gcttcatcac caacaacagc agcaagaccc gcgctgccta cgccgagaag 240
ctgcggcgcc tgggcttcgg cggccccgcg gggcccggcg ccagcctgga ggtcttcggc 300
acggcctact gcaccgcgct ctacctgcgc cagcgcctgg ccggcgcccc cgcgcccaag 360
gcctacgtgc tgggcaaccc agccctggcc gcgganctgg agccgtgggc gtcgccagcg 420
tgggcgtggg gcccgaccac tgcaagggca gggtcccggc gactggctga cgccccgctg 480
gaacccgact g                                                     491
```

<210> 354
<211> 401
<212> DNA
<213> Homo sapiens

<400> 354
```
ggcgtcccgg tgtggctgtg ccgttggtcc tgtgcggtca cttagccaag atgcctgagg 60
aaacccagac ccaagaccaa ccgatggagg aggaggaggt tgagacgttc gcctttcagg 120
cagaaattgc ccagttgatg tcattgatca tcaatacttt ctactcgaac aaagagatct 180
ttctgagaga gctcatttca aattcatcag atgcattgga caaaatccgg tatgaaagct 240
tgacagatcc cagtaaatta gactctggga aagagctgca tattaacctt ataccgaaca 300
aacaagatcg aactctcact attgtggata ctggaattgg aatgaccaag gctgacttga 360
tcaataacct tggtactatc gccaagtctg ggaccaaagc g                    401
```

<210> 355
<211> 451
<212> DNA
<213> Homo sapiens

<400> 355
```
tcttcagcgc atcagaagta tccagaatgt tcctgaaagc tcaggggctg tggaaactgt 60
tccagcattt caagaaatta cttctatgaa agaacgatgc aacaagcttc ttcagaaagt 120
tcagaaaaat aaagaattgg tgcagactga aatccaagaa agacattcct tcacaaaaga 180
```

```
gataattgct ttgaagaatt tctttcaaca gaccacaact tcattccaaa atatggcatt 240
ccaggatcac ccagaaaagt cagaacaatt tgaggagctt caaagcatcc ttaagaaagg 300
gaaactaact tttgagaata ttatggaaaa actgcgaatc aagtattccg aaatgtacac 360
catagtccct gcagagattg aatcccaggt ggaagaatgc agaaaagctt tagaagacat 420
agatgagaag attagccaat gaagtcttaa a                               451
```

<210> 356
<211> 441
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(441)
<223> n = A,T,C or G

<400> 356
```
gtcgcgcatc cggcggccca tgaacgcctt catggtgtgg gcaaaggacg agcgcaagcg 60
gctggctcag cagaacccgg acctgcacaa cgcggtgctc agcaagatgc tgggcaaagc 120
gtggaaggag ctgaacgcgg cggagaagcg gcccttcgtg gaggaagccg aacggctgcg 180
cgtgcagcac ttgcgcgacc accccaacta caagtaccgg ccgcgccgca agaagcaggc 240
gcgcaaggcc cggcggctgg agcccggctc tgctcccggg attagcgccc ccgcagccac 300
cgccgacctt tcccgcggcg tctggctcgn tcgcgccttc cgcgagctgc cccgctgggc 360
gccgagttca cggctggggc tgccaccccg agcgtcgctc tgacggctga cccgggagct 420
gcttttccac gccgcgcgcc a                                         441
```

<210> 357
<211> 451
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(451)
<223> n = A,T,C or G

<400> 357
```
gcggcggcgg aggccggtgg cgacgacgcc cgctgcgtgc ggctgagcgc cgagcgggca 60
caggcgctgc tggccgacgt ggacacgctg ctgttcgact gcgacggcgt gctgtggcgc 120
ggggagaccg ccgtgcctgg cgcgcccgag gccctgcggg cgctgcgagc ccgcggcaag 180
cgcctgggct tcatcaccaa caacagcagc aagacccgcg ctgcctacgc cgagaagctg 240
cggcgcctgg gcttcggcgg ccccgcgggg cccggcgcca gcctggaggt cttcggcacg 300
gcctactgca ccgcgctcta cctgcgccag cgcctggccg gcgcccccgc gcccaagcct 360
acgtgctggg cagcccagcc ctggccgcgg anctggaagc cgtgggcgtc gccagcgtgg 420
gcgtggggcc cgaaccactt gcaggcgag g                               451
```

<210> 358
<211> 571
<212> DNA
<213> Homo sapiens

<400> 358
```
gcggcgatgg cggcggcgga ggccggtggc gacgacgccc gctgcgtgcg gctgagcgcc 60
gagcgggcac aggcgctgct ggccgacgtg gacacgctgc tgttcgactg cgacggcgtg 120
```

```
ctgtggcgcg gggagaccgc cgtgcctggc gcgcccgagg ccctgcgggc gctgcgagcc 180
cgcggcaagc gcctgggctt catcaccaac aacagcagca agacccgcgc tgcctacgcc 240
gagaagctgc ggcgcctggg cttcggcggc cccgcggggc ccggcgccag cctggaggtc 300
ttcggcacgg cctactgcac cgcgctctac ctgcgccagc gcctggccgg cgcccccgcg 360
cccaagccta cgtgctgggc agcccagccc tggccgcgga gctggaggcc gtgggcgtcg 420
ccagcgtggg cgtggggccc gaccactgca gggcgagggt cccggcgact ggctgcacgc 480
gccgctggag cccgacgtgc gcgcggtggt ggtgggcttt gacccgcact tagctacatg 540
aagctcacca agcccttgcg ctacttgaag a                            571

<210> 359
<211> 511
<212> DNA
<213> Homo sapiens

<400> 359
cgctgctgtt atggccgcct ccttgaggta gtatccgcac atggaattct agggccgcag 60
gtgtatttac ggtaactgtc gccactagat ttcagcgcct ttggactctc ctgttttcac 120
tttctttgt tgactcccgt gtggccctcg tgggagcctg ttttggctgc agcggtgtct 180
ggggtgatgt ggaccccgga gctggcaatt ctgaggggat tccccactga ggctgagcgg 240
cagcaatgga aacaggaggg ggtcgtcggt tcagagagtg gatctttcct acaattgctg 300
ctggaaggga actatgaagc catattctta aattcaatga ctcaaaatat ttttaattca 360
acaacaaccg ctgaagaaaa gattgatagc tacctggaga agcaggtagt aacattcctg 420
gattactcaa cagatttgga cacaacggaa agacaacagt tgatatttct acttggtgtg 480
agcagtttgc aactttttgt tcaaagcaac t                            511

<210> 360
<211> 481
<212> DNA
<213> Homo sapiens

<400> 360
gcgttctcgg ggagctgctg ccgtagctgc cgccgccgct accaccgcgt tcgggtgtag 60
aatttggaat ccctgcgccg cgttaacaat gaagcagagt tcgaacgtgc cggctttcct 120
cagcaagctg tggacgcttg tggaggaaac ccacactaac gagttcatca cctggagcca 180
gaatggccaa agtttctgg tcttggatga gcaacgattt gcaaagaaa ttcttcccaa 240
atatttcaag cacaataata tggcaagctt tgtgaggcaa ctgaatatgt atggtttccg 300
taaagtagta catatcgact ctggaattgt aaagcaagaa agagatggtc ctgtagaatt 360
tcagcatcct tacttcaaac aaggacagga tgacttgttg gagaacatta aaaggaaggt 420
ttcatcttca aaaccagaag aaaataaaat cgtcaggaa gatttaacaa aaattataag 480
t                                                            481

<210> 361
<211> 551
<212> DNA
<213> Homo sapiens

<400> 361
cgtagaggaa gacactgtgg aggccagttc tggagctatt gcagcctcgg ttgcccggcc 60
ggggacccga gccgaaaagt tatcgtcaga atgtcgggca aagaccgaat tgaaatcttt 120
ccctcgcgaa tggcacagac catcatgaag gctcgtttaa agggagcaca gacaggtcga 180
aacctcctga agaaaaaatc tgatgcctta actcttcgat ttcgacagat cctaaagaag 240
ataatagaga ctaaaatgtt gatgggcgaa gtgatgagag aagctgcctt ttcactagct 300
gaagccaagt tcacagcagg tgacttcagc actacagtta tccaaaatgt caataaagcg 360
caagtgaaga ttcgagcgaa gaaagataat gtagcaggtg ttactttgcc agtatttgaa 420
```

```
cattaccatg aaggaactga cagttatgaa ctgactggtt tagccagagg tggggaacag 480
ttggctaaat taaagaggaa ttatgcccaa agcagtggaa ctactggtgg aactagcttc 540
tcttgcagac t                                                      551
```

<210> 362
<211> 481
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(481)
<223> n = A,T,C or G

<400> 362
```
gggttacatt ttggattaaa cctgtttccc ggttatgtgt agggaacagc aaagngatgc 60
acnaactttg aacattcgtt atgggaaaa catcctttaa cttcggggtc gtctgccaaa 120
gcagggtctg ggagggtcca tgcagttccc gntggtgtgg agggaaatgc cctggtctgg 180
cctccgagcc cccaggtcca ccgtctcccc tcccctcatt tgtaanaata gctacacact 240
aacattttgg gaaggagagg cacataactt tttttaacat ttggtaacta ggttatgggc 300
tctacattgt cagctacttg ggatatatat ttaattttct taaattcccg ttaaactcta 360
ttttatggtt ttgatttcag attgcaaaca tgtaaaacct gcatagcagc gagttctcgg 420
ttttgcggtt tctttagttc tttactgtca ctgtcatgta atcagctaat tctcttgtgg 480
a                                                                 481
```

<210> 363
<211> 461
<212> DNA
<213> Homo sapiens

<400> 363
```
ggaaccagga cctcggcgtg gcctagcgag ttatggcgac gaaggccgtg tgcgtgctga 60
agggcgacgg cccagtgcag ggcatcatca atttcgagca gaaggaaagt aatggaccag 120
tgaaggtgtg gggaagcatt aaaggactga ctgaaggcct gcatggattc catgttcatg 180
agtttggaga taatacagca ggctgtacca gtgcaggtcc tcactttaat cctctatcca 240
gaaaacacgg tgggccaaag gatgaagaga ggcatgttgg agacttgggc aatgtgactg 300
ctgacaaaga tggtgtggcc gatgtgtcta ttgaagattc tgtgatctca ctctcaggag 360
accattgcat cattggccgc acactggtgg tccatgaaaa acagatgact gggcaaagg 420
tggaaatgaa gaaagtacaa agacaggaaa cgcttgaagt c                      461
```

<210> 364
<211> 531
<212> DNA
<213> Homo sapiens

<400> 364
```
ggttctactt tctgcacgtc agaaatcaat tccatgtcag ctcgagtcct gctcttgctg 60
gtggtcccag gccatctgat tttcttctac atcatctacc tggtggaggg tcagtcagtc 120
ataaacagcc agaccttgt ggtgctctac ctgctggcag gcctgatcca ggtgacaatc 180
ctgctgtacc tcgcagaagt gatggttcgg ctgacttggc accaggccct ggatcctgac 240
aaccactgca tcccctacct tacagggctg ggggacctgc tcggtactgg cctcctggca 300
ctctgctttt tcactgactg gctactgaag agcaaggcag agctgggtgg catctcagaa 360
ctggcatctg gacctcccta actgggcccc gctggtccca tttgctcatt agaatttcct 420
ctcacatcag tgggatacag aaattcagtt tctcccttgc caggtccttg ggatggttga 480
```

cccctgcctc tgcagtaacc ttttgtgagt cttgctaagg tagctctcac a   531

<210> 365
<211> 4834
<212> DNA
<213> Homo sapiens

<400> 365
gatgtggagc tggggtccct gcaagtcatg aacaaaacga gaaagattat ggaacatggg 60
ggggccacct tcatcaatgc ctttgtgact acacccatgt gctgcccgtc acggtcctcc 120
atgctcaccg ggaagtatgt gcacaatcac aatgtctaca ccaacaacga gaactgctct 180
tcccctcgt ggcaggccat gcatgagcct cggactttg ctgtatatct taacaacact 240
ggctacagaa cagccttttt tggaaaatac ctcaatgaat ataatggcag ctacatcccc 300
cctgggtggc gagaatggct tggattaatc aagaattctc gcttctataa ttacactgtt 360
tgtcgcaatg gcatcaaaga aaagcatgga tttgattatg caaaggacta cttcacagac 420
ttaatcacta acgagagcat taattacttc aaaatgtcta agagaatgta tccccatagg 480
cccgttatga tggtgatcag ccacgctgcg ccccacggcc ccgaggactc agccccacag 540
ttttctaaac tgtaccccaa tgcttcccaa cacataactc ctagttataa ctatgcacca 600
aatatggata aacactggat tatgcagtac acaggaccaa tgctgcccat ccacatggaa 660
tttacaaaca ttctacagcg caaaaggctc cagactttga tgtcagtgga tgattctgtg 720
gagaggctgt ataacatgct cgtggagacg ggggagctgg agaatactta catcatttac 780
accgccgacc atggttacca tattgggcag tttggactgg tcaaggggaa atccatgcca 840
tatgactttg atattcgtgt gccttttttt attcgtggtc caagtgtaga accaggatca 900
atagtcccac agatcgttct caacattgac ttggccccca cgatcctgga tattgctggg 960
ctcgacacac ctcctgatgt ggacggcaag tctgtcctca aacttctgga cccagaaaag 1020
ccaggtaaca ggtttcgaac aaacaagaag gccaaaattt ggcgtgatac attcctagtg 1080
gaaagaggca aatttctacg taagaaggaa gaatccagca agaatatcca acagtcaaat 1140
cacttgccca aatatgaacg ggtcaaagaa ctatgccagc aggccaggta ccagacagcc 1200
tgtgaacaac cggggcagaa gtggcaatgc attgaggata catctggcaa gcttcgaatt 1260
cacaagtgta aaggacccag tgacctgctc acagtccggc agagcacgcg gaacctctac 1320
gctcgcggct ccatgacaa agacaaagag tgcagttgta gggagtctgg ttaccgtgcc 1380
agcagaagcc aaagaaagag tcaacggcaa ttcttgagaa accagggga tccaaagtac 1440
aagcccagat ttgtccatac tcggcagaca cgttccttgt ccgtcgaatt tgaaggtgaa 1500
atatatgaca taaatctgga agaagaagaa gaattgcaag tgttgcaacc aagaaacatt 1560
gctaagcgtc atgatgaagg ccacaagggg ccaagagatc tccaggcttc cagtggtggc 1620
aacaggggca ggatgctggc agatagcagc aacgccgtgg gcccacctac cactgtccga 1680
gtgacacaca agtgttttat tcttcccaat gactctatcc attgtgagag agaactgtac 1740
caatcggcca gagcgtggaa ggaccataag gcatacattg acaaagagat tgaagctctg 1800
caagataaaa ttaagaattt aagagaagtg agaggacatc tgaagagaag gaagcctgag 1860
gaatgtagct gcagtaaaca aagctattac aataaagaga aaggtgtaaa aaagcaagag 1920
aaattaaaga gccatcttca cccattcaag gaggctgctc aggaagtaga tagcaaactg 1980
caactttttca aggagaacaa ccgtaggagg aagaaggaga ggaaggagaa gagacggcag 2040
aggaagggg aagagtgcag cctgcctggc ctcacttgct tcacgcatga caacaaccac 2100
tggcagacag ccccgttctg gaacctggga tctttctgtg cttgcacgag ttctaacaat 2160
aacacctact ggtgtttgcg tacagttaat gagacgcata attttctttt ctgtgagttt 2220
gctactggct ttttggagta ttttgatatg aatacagatc cttatcagct cacaaataca 2280
gtgcacacgg tagaacgagg cattttgaat cagctacacg tacaactaat ggagctcaga 2340
agctgtcaag gatataagca gtgcaaccca agacctaaga atcttgatgt tggaaataaa 2400
gatggaggaa gctatgacct acacagagga cagttatggg atggatggga aggttaatca 2460
gccccgtctc actgcagaca tcaactggca aggcctagag gagctacaca gtgtgaatga 2520
aaacatctat gagtacagac aaaactacag acttagtctg gtggactgga ctaattactt 2580
gaaggattta gatagagtat ttgcactgct gaagagtcac tatgagcaaa ataaaacaaa 2640
taagactcaa actgctcaaa gtgacgggtt cttggttgtc tctgctgagc acgctgtgtc 2700

```
aatggagatg gcctctgctg actcagatga agacccaagg cataaggttg ggaaaacacc 2760
tcatttgacc ttgccagctg accttcaaac cctgcatttg aaccgaccaa cattaagtcc 2820
agagagtaaa cttgaatgga ataacgacat tccagaagtt aatcatttga attctgaaca 2880
ctggagaaaa accgaaaaat ggacggggca tgaagagact aatcatctgg aaaccgattt 2940
cagtggcgat ggcatgacag agctagagct cgggcccagc cccaggctgc agcccattcg 3000
caggcacccg aaagaacttc cccagtatgg tggtcctgga aaggacattt ttgaagatca 3060
actatatctt cctgtgcatt ccgatggaat ttcagttcat cagatgttca ccatggccac 3120
cgcagaacac cgaagtaatt ccagcatagc ggggaagatg ttgaccaagg tggagaagaa 3180
tcacgaaaag gagaagtcac agcacctaga aggcagcgcc tcctcttcac tctcctctga 3240
ttagatgaaa ctgttacctt accctaaaca cagtatttct ttttaacttt tttatttgta 3300
aactaataaa ggtaatcaca gccaccaaca ttccaagcta ccctgggtac ctttgtgcag 3360
tagaagctag tgagcatgtg agcaagcggt gtgcacacgg agactcatcg ttataattta 3420
ctatctgcca agagtagaaa gaaaggctgg ggatatttgg gttggcttgg ttttgatttt 3480
ttgcttgttt gtttgttttg tactaaaaca gtattatctt ttgaatatcg tagggacata 3540
agtatataca tgttatccaa tcaagatggc tagaatggtg cctttctgag tgtctaaaac 3600
ttgacacccc tggtaaatct ttcaacacac ttccactgcc tgcgtaatga agttttgatt 3660
cattttttaac cactggaatt tttcaatgcc gtcattttca gttagatgat tttgcacttt 3720
gagattaaaa tgccatgtct atttgattag tcttattttt ttatttttac aggcttatca 3780
gtctcactgt tggctgtcat tgtgacaaag tcaaataaac ccccaaggac gacacacagt 3840
atggatcaca tattgtttga cattaagctt ttgccagaaa atgttgcatg tgtttttacct 3900
cgacttgcta aaatcgatta gcagaaaggc atggctaata atgttggtgg tgaaaataaa 3960
taaataagta aacaaatga agattgcctg ctctctctgt gcctagcctc aaagcgttca 4020
tcatacatca tacctttaag attgctatat tttgggttat tttcttgaca ggagaaaaag 4080
atctaaagat cttttatttt catcttttt ggttttcttg gcatgactaa gaagcttaaa 4140
tgttgataaa atatgactag ttttgaattt acaccaagaa cttctcaata aaagaaaatc 4200
atgaatgctc cacaatttca acataccaca agagaagtta atttcttaac attgtgttct 4260
atgattattt gtaagacctt caccaagttc tgatatcttt taaagacata gttcaaaatt 4320
gcttttgaaa atctgtattc ttgaaaatat ccttgttgtg tattaggttt ttaaataccaa 4380
gctaaaggat tacctcactg agtcatcagt accctcctat tcagctcccc aagatgatgt 4440
gtttttgctt accctaagag aggtttttctt cttattttta gataattcaa gtgcttagat 4500
aaattatgtt ttctttaagt gtttatggta aactctttta aagaaaattt aatatgttat 4560
agctgaatct ttttggtaac tttaaatctt tatcatagac tctgtacata tgttcaaatt 4620
agctgcttgc ctgatgtgtg tatcatcggt gggatgacag aacaaacata tttatgatca 4680
tgaataatgt gctttgtaaa aagatttcaa gttattagga agcatactct gttttttaat 4740
catgtataat attccatgat acttttatag aacaattctg gcttcaggaa agtctagaag 4800
caatatttct tcaaataaaa ggtgtttaaa cttt                          4834
```

<210> 366
<211> 818
<212> PRT
<213> Homo sapiens

<400> 366

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Asp Val Glu Leu Gly Ser Leu Gln Val Met Asn Lys Thr Arg Lys Ile
                5                   10                  15
Met Glu His Gly Gly Ala Thr Phe Ile Asn Ala Phe Val Thr Thr Pro
            20                  25                  30
Met Cys Cys Pro Ser Arg Ser Ser Met Leu Thr Gly Lys Tyr Val His
        35                  40                  45
Asn His Asn Val Tyr Thr Asn Asn Glu Asn Cys Ser Ser Pro Ser Trp
    50                  55                  60
Gln Ala Met His Glu Pro Arg Thr Phe Ala Val Tyr Leu Asn Asn Thr
65                  70                  75                  80
Gly Tyr Arg Thr Ala Phe Phe Gly Lys Tyr Leu Asn Glu Tyr Asn Gly
```

```
                     85                    90                    95
Ser Tyr Ile Pro Pro Gly Trp Arg Glu Trp Leu Gly Leu Ile Lys Asn
            100                   105                   110
Ser Arg Phe Tyr Asn Tyr Thr Val Cys Arg Asn Gly Ile Lys Glu Lys
            115                   120                   125
His Gly Phe Asp Tyr Ala Lys Asp Tyr Phe Thr Asp Leu Ile Thr Asn
            130                   135                   140
Glu Ser Ile Asn Tyr Phe Lys Met Ser Lys Arg Met Tyr Pro His Arg
145                   150                   155                   160
Pro Val Met Met Val Ile Ser His Ala Ala Pro His Gly Pro Glu Asp
                165                   170                   175
Ser Ala Pro Gln Phe Ser Lys Leu Tyr Pro Asn Ala Ser Gln His Ile
            180                   185                   190
Thr Pro Ser Tyr Asn Tyr Ala Pro Asn Met Asp Lys His Trp Ile Met
            195                   200                   205
Gln Tyr Thr Gly Pro Met Leu Pro Ile His Met Glu Phe Thr Asn Ile
            210                   215                   220
Leu Gln Arg Lys Arg Leu Gln Thr Leu Met Ser Val Asp Asp Ser Val
225                   230                   235                   240
Glu Arg Leu Tyr Asn Met Leu Val Glu Thr Gly Glu Leu Glu Asn Thr
                245                   250                   255
Tyr Ile Ile Tyr Thr Ala Asp His Gly Tyr His Ile Gly Gln Phe Gly
                260                   265                   270
Leu Val Lys Gly Lys Ser Met Pro Tyr Asp Phe Asp Ile Arg Val Pro
                275                   280                   285
Phe Phe Ile Arg Gly Pro Ser Val Glu Pro Gly Ser Ile Val Pro Gln
                290                   295                   300
Ile Val Leu Asn Ile Asp Leu Ala Pro Thr Ile Leu Asp Ile Ala Gly
305                   310                   315                   320
Leu Asp Thr Pro Pro Asp Val Asp Gly Lys Ser Val Leu Lys Leu Leu
                325                   330                   335
Asp Pro Glu Lys Pro Gly Asn Arg Phe Arg Thr Asn Lys Lys Ala Lys
                340                   345                   350
Ile Trp Arg Asp Thr Phe Leu Val Glu Arg Gly Lys Phe Leu Arg Lys
                355                   360                   365
Lys Glu Glu Ser Ser Lys Asn Ile Gln Gln Ser Asn His Leu Pro Lys
                370                   375                   380
Tyr Glu Arg Val Lys Glu Leu Cys Gln Gln Ala Arg Tyr Gln Thr Ala
385                   390                   395                   400
Cys Glu Gln Pro Gly Gln Lys Trp Gln Cys Ile Glu Asp Thr Ser Gly
                405                   410                   415
Lys Leu Arg Ile His Lys Cys Lys Gly Pro Ser Asp Leu Leu Thr Val
                420                   425                   430
Arg Gln Ser Thr Arg Asn Leu Tyr Ala Arg Gly Phe His Asp Lys Asp
                435                   440                   445
Lys Glu Cys Ser Cys Arg Glu Ser Gly Tyr Arg Ala Ser Arg Ser Gln
                450                   455                   460
Arg Lys Ser Gln Arg Gln Phe Leu Arg Asn Gln Gly Thr Pro Lys Tyr
465                   470                   475                   480
Lys Pro Arg Phe Val His Thr Arg Gln Thr Arg Ser Leu Ser Val Glu
                485                   490                   495
Phe Glu Gly Glu Ile Tyr Asp Ile Asn Leu Glu Glu Glu Glu Glu Leu
                500                   505                   510
Gln Val Leu Gln Pro Arg Asn Ile Ala Lys Arg His Asp Glu Gly His
```

```
                515                   520                   525
Lys Gly Pro Arg Asp Leu Gln Ala Ser Ser Gly Gly Asn Arg Gly Arg
        530                 535                 540
Met Leu Ala Asp Ser Ser Asn Ala Val Gly Pro Pro Thr Thr Val Arg
545                 550                 555                 560
Val Thr His Lys Cys Phe Ile Leu Pro Asn Asp Ser Ile His Cys Glu
                565                 570                 575
Arg Glu Leu Tyr Gln Ser Ala Arg Ala Trp Lys Asp His Lys Ala Tyr
            580                 585                 590
Ile Asp Lys Glu Ile Glu Ala Leu Gln Asp Lys Ile Lys Asn Leu Arg
            595                 600                 605
Glu Val Arg Gly His Leu Lys Arg Arg Lys Pro Glu Glu Cys Ser Cys
        610                 615                 620
Ser Lys Gln Ser Tyr Tyr Asn Lys Glu Lys Gly Val Lys Lys Gln Glu
625                 630                 635                 640
Lys Leu Lys Ser His Leu His Pro Phe Lys Glu Ala Ala Gln Glu Val
                645                 650                 655
Asp Ser Lys Leu Gln Leu Phe Lys Glu Asn Asn Arg Arg Arg Lys Lys
            660                 665                 670
Glu Arg Lys Glu Lys Arg Arg Gln Arg Lys Gly Glu Glu Cys Ser Leu
            675                 680                 685
Pro Gly Leu Thr Cys Phe Thr His Asp Asn Asn His Trp Gln Thr Ala
        690                 695                 700
Pro Phe Trp Asn Leu Gly Ser Phe Cys Ala Cys Thr Ser Ser Asn Asn
705                 710                 715                 720
Asn Thr Tyr Trp Cys Leu Arg Thr Val Asn Glu Thr His Asn Phe Leu
                725                 730                 735
Phe Cys Glu Phe Ala Thr Gly Phe Leu Glu Tyr Phe Asp Met Asn Thr
                740                 745                 750
Asp Pro Tyr Gln Leu Thr Asn Thr Val His Thr Val Glu Arg Gly Ile
            755                 760                 765
Leu Asn Gln Leu His Val Gln Leu Met Glu Leu Arg Ser Cys Gln Gly
        770                 775                 780
Tyr Lys Gln Cys Asn Pro Arg Pro Lys Asn Leu Asp Val Gly Asn Lys
785                 790                 795                 800
Asp Gly Gly Ser Tyr Asp Leu His Arg Gly Gln Leu Trp Asp Gly Trp
            805                 810                 815
Glu Gly
```

```
<210> 367
<211> 361
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(361)
<223> n = A,T,C or G

<400> 367
ttnggnttta anaagtacca atttaataat gaatacttan aaatatggna cncagatacc 60
atagtaatat aaaatgcata caattttaaa ttattttctt ataaactctn tacatgaatg 120
gctggcggct tccaacanat aaacttttgg acaaaggnac aanatatttt tgggcattca 180
```

ttttaaatac catctagtta tccaattagg aggnttctaa aaaaataaat atgacaaata 240
tatggatttc tgaagtataa actgacatac aaatctatat attttcttaa tacttttcat 300
taaagcatct ttaaagcatt ctgtaacatg aagttganag ttcaaattan atgtaatgaa 360
a   361

<210> 368
<211> 558
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(558)
<223> n = A,T,C or G

<400> 368
ccagtgtggt ggaattcgac tcgtctcagg ccagttgcag ccttctcagc caaacgccga 60
ccaaggaaaa ctcactacca tgagaattgc agtgatttgc ttttgcctcc taggcatcac 120
ctgtgccata ccagttaaac aggctgattc tggaagttct gaggaaaagc agctttacaa 180
caantaccca gatgctgtgg ccacatggct aaaccctgac ccatctcaga agcagaatct 240
cctagcccca cagaatgctg tgtcctctga agaaaccaat gactttaaac aagagaccct 300
tccaagtaag tccaacgaaa gccatgacca catggatgat atggatgatg aagatgatga 360
tgaccatgtg gacagccagg actccattga ctcgaacgac tctgatgatg tagatgacac 420
tgatgattct caccagtctg atgagtctca ccattctgat gaatctgatg aactggtcac 480
tgattttccc acggacctgc cagcaaccga agttttcact ccagttgtcc ccacagtaga 540
cacatatgat ggccgagg   558

<210> 369
<211> 1021
<212> DNA
<213> Homo sapiens

<400> 369
tttttacaac atatatcttt aattaaattt atattggkgg gtttaaaaaa cattaagtca 60
ggagatgata gctagggaaa taaggtatcc tgtgagtatt tataacaaaa tatttaaaat 120
ttaaaaagaa taagaaacat caattggctt tttgtaactt aaaagagact aaccaagtgt 180
tgtttcccag ttctgtacaa gcagaggcca caggaggatt cttacataag aagcacaggg 240
aaaagaattg ttaattctgc gtgtgtgttt ttgtttctca gaattgtttg gaagaacttt 300
gtccagtcag aaatgagtaa aaacaagatg taagaaacat taaaacaggg ggcatatggt 360
cttaagagat aatcttggag aatatagcaa aagacaaatt gctccattag atattataat 420
ttggtatgta acatgaacat ttaaaattct gattaaagtg actaaaaggg tttgtttttt 480
aaaaaaaatc aaaacagaac ttacgggata aaactcaaaa taaatttact ctcagtagta 540
acttgatgta ggaatataag tcctctcact ttgataaaca tgaatataaa atattgctgt 600
ctgtattcta gggtttccta cattttctgt aaagagtgat tcatgctatg tcatatgtaa 660
atgactcaac attttgagct aaaaggctgt tcacaatata cacattcttt acttacaaag 720
caaaataagc ttaacacctt tatattaaaa acccgggata cagcaggatt agtagcaccg 780
tgaaaaataa ttcttcccac aaactgcagt ctttatttt actcaatgtg actcttctct 840
taattgaatt tttaatgtac cattttagta actgggcaaa atatataatt ttcatcttat 900
aattcttgga gaaagtcatt ctggacccaa aaagtaaatt cacttcctta tttctttagt 960
agaaaaataa tagagacttt gctctggcgc attgctgagg tacatctgaa tcttcatggt 1020
t   1021

<210> 370
<211> 204

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(204)
<223> n = A,T,C or G

<400> 370
ggaaagcgga agancaggtc ttgatgtgtc ctagaatttt gccatttctg agattgagcc 60
attgaaggca ttccatttct aaagcttatt tagccggtgc ttctaaagaa ttccacacta 120
acgtgataac atggtttttg taacaataaa tgtaggatat ttcctggcac atgcaaataa 180
acctaatcat tgtttcttta aaaa 204

<210> 371
<211> 628
<212> DNA
<213> Homo sapiens

<400> 371
gtgatttcta atcctccctt ttttgattta gttggatgtg cttttaaatg tcctttgcct 60
gcttgaggtg gaaaggggac ctttttgagt tgtcattttg cactttcaaa acttattttc 120
ttggaaaaca atatttatag ggcttaaagc ccattttcat ttctaatcta aattatgtgt 180
gcctatctga aaactttggg ctctttcttg tttctttccc aaaattcaga agttaatggg 240
cttttatgtt tttctatatt ttttttattt caatgatttg gcctgtctat gttaggctaa 300
aaaataacct tgtgtatgct accaacttaa agtgcattat tttgtgtcac tttttttttt 360
cttgtaaaaa tgacttggat tgaaaatatg tggtagcctt tttatttcta cattaagttc 420
tacctaggat atttccaagg actgccacaa aacccatatg tgcagtactt tactactttg 480
ggaaagctgc atctttctac cacatttttaa catctaatat atttaatttc tttgaagagg 540
gttctgtgta cgttattgta gttcccagtt taatatagtt ctttgtatct cttaacaggg 600
tggaagttat tgcaaaacac tctggaaa 628

<210> 372
<211> 473
<212> DNA
<213> Homo sapiens

<400> 372
ccagtgtggt ggaattcctg ccgccctgcc gccctgccgc cctgccgccg gtggtcgctg 60
cccgtggtgc tccgtcgccc ccgccacctc acgtcctccc gtgcgtcggg agcgtctcgg 120
ctacaacatg ttgggcatga tcaagaactc gctgttcgga agcgtagaga cgtggccttg 180
gcaggtccta agcaaagggg acaaggaaga agttgcctat gaagaaaggg cctgtgaagg 240
cggcaaattt gccacagtag aagtgacaga taagcctgtg gatgaggctc tacgggaagc 300
aatgcccaag gtcgcaaagt atgcaggggg caccaatgac aagggaattg ggatggggat 360
gacagtccct atttcctttg ctgtgttccc caatgaagat ggctctctgc agaagaaatt 420
aaaagtctgg ttccggattc caaaccaatt tcaaagcgac ccaccagctc cca 473

<210> 373
<211> 283
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1)...(283)
<223> n = A,T,C or G

<400> 373
tttaagtcaa tgccttttat ttttagtttt tctgaagaca aagctcttat aagaatcaca 60
gatgaaagat caggcacaaa tcacattttc ccccttaata acaaaataca aatccaataa 120
ttttagaaaa tcagttttta gtgacccana tgcctggaga aaagctgcca ggattttct 180
ggtctatcgc agaattttct acatcaatga gaaggatgct gcatatcttg gctgtattat 240
ttcctaccgn gagaaaagaa acttaatata tggaacatgc ttt 283

<210> 374
<211> 529
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(529)
<223> n = A,T,C or G

<400> 374
tccagngtgg tggaattccg cgcgcggggc gctgctgctg gcgctgctgc tggctcgggc 60
tggactcagg aagccggagt cgcaggaggc ggcgcccta tcaggaccat gcggccgacg 120
ggtcatcacg tcgcgcatcg tgggtggaga ggacgccgaa ctcgggcgtt ggccgtggca 180
ggggagcctg cgcctgtggg attcccacgt atgcggagtg agcctgctca gccaccgctg 240
ggcactcacg gcggcgcact gctttgaaac tgaccttagt gatccctccg ggtggatggt 300
ccagtttggc cagctgactt ccatgccatc cttctggagc ctgcaggcct actacacccg 360
ttacttcgta tcgaatatct atctgagccc tcgctacctg gggaattcac cctatgacat 420
tgccttggtg aagctgtctg cacctgtcac ctacactaaa cacatccagc ccatctgtct 480
ccaggccttc acatttgagt ttgagaaccg gacagactgc tgggtgact 529

<210> 375
<211> 519
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(519)
<223> n = A,T,C or G

<400> 375
tttgaattta naccaagaac ttctcaataa aagaaaatca tgaatgctcc acaatttcaa 60
cataccacaa gagaagttaa tttcttaaca ttgtgttcta tgattatttg taagaccttc 120
accaagttct gatatctttt aaagacatag ttcaaaattg cttttgaaaa tctgtattct 180
tgaaaatatc cttgttgtgt attaggtttt taaataccag ctaaaggatt acctcactga 240
gtcatcagta ccctcctatt cagctcccca agatgatgtg tttttgctta ccctaagaga 300
ggttttcttc ttatttttag ataattcaag tgcttagata aattatgttt tctttaagtg 360
tttatggtaa actcttttaa agaaaattta atatgttata gctgaatctt tttggtaact 420
ttaaatcttt atcatagact ctgtacatat gttcaaatta gctgcttgcc tgatgtgtgt 480
atcatcggtg ggatgacaga acaaacatat ttatgatca 519

<210> 376
<211> 171

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<212> DNA
<213> Homo sapiens

<400> 376
tcaagattta gccaaggctg tggcaaaggt gtaacttgta aacttgagtt ggagtactat 60
atttacaaat aaaattggca ccatgtgcca tctgtacata ttactgttgc atttactttt 120
aataaagctt gtggcccctt ttactttttt atagcttaaa aaaaaaaaaa a        171


<210> 377
<211> 270
<212> DNA
<213> Homo sapiens

<400> 377
ccagtgtggt ggaattaatc aggcctccca aatttagcag gtgctgggga ggaccctagg 60
gagtggttta tgggggctag ctggtgaaac tgccctttcc tttctgttct atgagtgtga 120
tggtgtttga gaaaatgtgg ggctatggtt caggcgcact tcacatgtgc aaagatggag 180
aaagcactca cctacacgtt taggctcaga atattgattg aaacattttg aatgatcaaa 240
aataaaatgt tattttttaaa gtttcaaaaa                                 270


<210> 378
<211> 416
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(416)
<223> n = A,T,C or G

<400> 378
ccagtgtggt ggaattcgcc actgctaggg tttacaggtc atccctggat taaataagtg 60
atattgtgtt ttttttttct ttgacacaaa gtaaaattat aattaatatt gaataaagta 120
aaaatgaact ccagtgnggn ggaattcggc actcaggaaa tattagttgc atgaacgaag 180
gctgcatttt catcanaaca acatgcagtt caaccccttc atgtttcaat gagggttcan 240
atncccanag ggctatgcta tcatcctgga gcccactctg ctaacaatta gcanacgga 300
agccttaatt tccanattct agtgaacttg atgagtcaan actattgcaa ttggaaatct 360
gttctcctct gctgctgcat tccctgctta atactcaagc canaaccag gaaggt      416


<210> 379
<211> 576
<212> DNA
<213> Homo sapiens

<400> 379
ttcctatgat cattaaactc attctcaggg ttaagaaagg aatgtaaatt tctgcctcaa 60
tttgtacttc atcaataagt ttttgaagag tgcagatttt tagtcaggtc ttaaaaataa 120
actcacaaat ctggatgcat ttctaaattc tgcaaatgtt tcctggggtg acttaacaag 180
gaataatccc acaatatacc tagctaccta atacatggag ctggggctca acccactgtt 240
tttaaggatt tgcgcttact tgtggctgag gaaaaataag tagttcgagg aagtagtttt 300
taaatgtgag cttatagata gaaacagaat atcaacttaa ttatgaaatt gttagaacct 360
gttctcttgt atctgaatct gattgcaatt actattgtac tgatagactc cagccattgc 420
aagtctcaga tatcttagct gtgtagtgat tcttgaaatt cttttaaga aaaattgagt 480
agaaagaaat aaaccctttg taaatgaggc ttggctttttg tgaaagatca tccgcaggct 540
```

```
atgttaaaag gattttagct cactaaaagt gtaata                            576
```

<210> 380
<211> 347
<212> DNA
<213> Homo sapiens

<400> 380
```
ccagtgtggt ggaattcgga gagaaggaag cctggggccc agccgaggaa gcgaaaaacc 60
aaacaagcag ttcccattgt ggaaccccaa gaacctgaga tcaaactaaa atatgccacc 120
cagccactgg ataaaactga tgccaagaac aagtcttttt acccttacat ccatgtagta 180
aataagtgtg aacttggagc cgtttgtaca atcatcaatg ctgaggaaga agaacagacc 240
aaattagtga ggggcaggaa gggtcagagg tcactgaccc ctccacctag cagcactgaa 300
agcaaggcgc tcccggcctc gtcctttatg ctgcagggac ctgttgt           347
```

<210> 381
<211> 258
<212> DNA
<213> Homo sapiens

<400> 381
```
gacaagctcc tggtcttgag atgtcttctc gttaaggaga tgggcctttt ggaggtaaag 60
gataaaatga atgagttctg tcatgattca ctattctaga acttgcatga cctttactgt 120
gttagctctt tgaatgttct tgaaatttta gactttcttt gtaaacaaat gatatgtcct 180
tatcattgta taaaagctgt tatgtgcaac agtgtggaga ttccttgtct gatttaataa 240
aatacttaaa cactgaaa                                          258
```

<210> 382
<211> 580
<212> DNA
<213> Homo sapiens

<400> 382
```
gccgtaggga gtacctgctg ccccagctga ctgtggcccc ctccgtgatc catccatctc 60
cagggagcaa gacagagacg caggaatgga aagcggagtt cctaacagga tgaaagttcc 120
cccatcagtt cccccagtac ctccaagcaa gtagctttcc acatttgtca cagaaatcag 180
aggagagatg gtgttgggag ccctttggag aacgccagtc tcccaggccc cctgcatcta 240
tcgagtttgc aatgtcacaa cctctctgat cttgtgctca gcatgattct ttaatagaag 300
ttttattttt tcgtgcactc tgctaatcat gtgggtgagc cagtggaaca gcgggagacc 360
tgtgctagtt ttacagattg cctcctaatg acgcggctca aaaggaaacc aagtggtcag 420
gagttgtttc tgacccactg atctctacta ccacaaggaa aatagtttag gagaaaccag 480
cttttactgt ttttgaaaaa ttacagcttc accctgtcaa gttaacaagg aatgcctgtg 540
ccaataaaag gtttctccaa cttgaagtct actctgaaaa            580
```

<210> 383
<211> 608
<212> DNA
<213> Homo sapiens

<400> 383
```
gtgctagatg aaaagcgtgc aatatgytttt aaagctatca acaaaaactg aatattataa 60
gcaagcaata tcatagtaat tggcagatta gctcatattc tatacagcat cgtttaaata 120
ggaaaaattt aatgctagca aaaataaat ttagaaatat ggcatgacat gaaaatacaa 180
tcttatattt acaccagctt ttcactaata ttttgtacct aaggtgatgg ggaactccat 240
```

```
tcagataata aaaattctctt tcagctagag aagttaacag gaataaatat atgaacaaaa 300
aagctgcaag gataaatgtg gagaaaatga tgagaattag ctaacatttt taagtttttt 360
taaactttct tcccctcact tagttgtact taatatttag tggaaagtaa taatttttt 420
aattttctat caactaatag tatagtaact atgattaact tgtttacttt ttctgaggat 480
tagtaaatca attttttttt tatttcaaat ttttggattt acacttgagg gtaaattaaa 540
tctggtaaac tgaatttcct agttaaataa aattagttgc agtatatgat gaacagtgta 600
tgactcaa                                                          608
```

<210> 384
<211> 585
<212> DNA
<213> Homo sapiens

<400> 384
```
ttatttcctt aaatattgct acaaaaggaa gatgcgggtg taagccctga ttttttttc 60
tcccaagaaa aatcttaaag gaccacttta gataatattt gattcctact gtaaaattta 120
gaaaatgatg aattcttgtc catttttgta atcaagattt taggaaaaac agaagtacat 180
ctatctttat gaaattttgg gcaggttttt gtgtatcaat attttgtact tttagggaat 240
attttatttt ttagttattt gtgtcaaatt ataattataa aaggtacagc agaaaatata 300
ccatgttttt atataggttc acacctgtac ttaggaggga ccctgtccat ctatatactt 360
tttgtataaa attttaaaat gttaaagatc cacaaggtct taataaaatg attctatagc 420
tagaaaaaca tttaccttcc cagtgctttg cactaaaata tactgtgaaa ggaaactaga 480
aagactgtaa ctattgctgg aaatgttcta tattgaatgt acatgctctt gttggaaaaa 540
tgtctatatg tgatggaaat aaaccagaat cgaagttatt tcaaa              585
```

<210> 385
<211> 511
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(511)
<223> n = A,T,C or G

<400> 385
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atattgtaca gtatttatcg agataaacat ggtwatcaaa atgtccattg tttataagct 60
gagaatttgc caatattttt caaggagagg cttcttgctg aattttgatt ctgcagctga 120
aatttaggac agttgcaaac gtgaaaagaa gaaaattatt caaatttgga cattttaatt 180
gtttaaaaat tgtacaaaag gaaaaaatta gaataagtac tggcgaacca tctctgtggt 240
cttgtttaaa aagggcaaaa gttttagact actaaatttt ttaacagtaa gttataaaat 300
ttagtagtct aaaacttata acttactgtt aaaagcaaaa atggccatgc aggttgacac 360
cgttggtaat ttataatagc ttttgttcga tcccaacttt ccattttgtt cagataaaaa 420
aaaccatgaa attactgngt ttgaaatatt ttcttatggt ttgtaatatt tctgtaaatt 480
tattgtgata ttttaaggnt ttccccccctt t                            511
```

<210> 386
<211> 311
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(311)
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<223> n = A,T,C or G

<400> 386
gtggaattcc atgaatntag ttcccatcat gacttanaag gtgctgtagg tgggtactac 60
ccagaaccca gtnagctttg tcacttggat caaagtgatt ctgatttcca tggagatctt 120
acatttcaac acgtatttca taaccacact taccacttac agccaactgc accagaatct 180
acttctgaac cttttccgtg gcctgggaag tcacagaaga taaggagtag ataccttgaa 240
gacacagata gaaacttgag ccgtgatgaa cagcgngcta aagctttgca tatccctttt 300
tctgtagatg a 311

<210> 387
<211> 461
<212> DNA
<213> Homo sapiens

<400> 387
cacagatagc aagacttcat ttcaggagtt gggagtggga agtaggaagt gtttaatccc 60
aagttttggt gccctaaaat ggctagtagt atagttaatt ctcaattctc tagctgtgat 120
cttctgtgcc ttctatctct tcctaaggaa aaccacatta gatgaaccca gggctcagtc 180
attttaggga gagggttgag acaacactgc cagcaacaca gctggaatca cccgagtcgg 240
gaacattaaa gttcctgaga gaatatgaaa caactatcaa cataatattt ctccctactt 300
ttacagtaaa atattggaag taaataaata tagggaatgc aacaactggc taggagtgtt 360
ttacattcag ttgtttggaa gcataacaca ttcagctcct ttgaatcttc ccgttagaaa 420
atacagaatt actctatcac cttttaaggt acagtaaaaa a 461

<210> 388
<211> 555
<212> DNA
<213> Homo sapiens

<400> 388
ggataaaggc cagggatgct gctcaacctc ctaccatgta caggacgtct ccccattaca 60
actacccaat ccgaagtgtc aactgtgtca ggactaagaa accctggttt tgagtagaaa 120
agggcctgga aagaggggag ccaacaaatc tgtctgcttc ctcacattag tcattggcaa 180
ataagcattc tgtctctttg gctgctgcct cagcacagag agccagaact ctatcgggca 240
ccaggataac atctctcagt gaacagagtt gacaaggcct atgggaaatg cctgatggga 300
ttatcttcag cttgttgagc ttctaagttt ctttcccttc attctaccct gcaagccaag 360
ttctgtaaga gaaatgcctg agttctagct caggtttttct tactctgaat ttagatctcc 420
agacccttcc tggccacaat tcaaattaag gcaacaaaca tataccttcc atgaagcaca 480
cacagacttt tgaaagcaag gacaatgact gcttgaattg aggccttgag gaatgaagct 540
ttgaaggaaa agaat 555

<210> 389
<211> 563
<212> DNA
<213> Homo sapiens

<400> 389
ttattttggt cagctgagta ccatcaggat atttaaccct ttaagtgctg ttttgggagt 60
agaaaactaa agcaacaata cttcctcttg acagctttga ttggaatggg gttattagat 120
cattcacctt ggtcctacac tttttaggat gcttggtgaa cataacacca cttataatga 180
acatccctgg ttcctatatt ttgggctatg tgggtaggaa ttgttacttg ttactgcagc 240
agcagcccta gaaagtaagc ccagggcttc agatctaagt tagtccaaaa gctaaatgat 300
ttaaagtcaa gttgtaatgc taggcataag cactctataa tacattaaat tataggccga 360

gcaattaggg aatgtttctg aaacattaaa cttgtattta tgtcactaaa attctaacac 420
aaacttaaaa aatgtgtctc atacatatgc tgtactaggc ttcatcatgc atttctaaat 480
ttgtgtatga tttgaatata tgaaagratt tatacaagag tgttatttaa aattattaaa 540
aataaatgta tataatttga aaa 563

<210> 390
<211> 278
<212> DNA
<213> Homo sapiens

<400> 390
gaacattatg ttttagatgg gtagtactag ctactcatct gtcccccaga aacccaagct 60
aagcatggac atattgaaga gaatgtcagc accattaaaa aaactctaga aaaatcacat 120
gtgatgactg aggttaattc agtctgtcaa ttacatcagt ataattgcct tcttgtaacc 180
ctaagtatgg tgaagcagaa ttgaattcta caaaagtctt tcatctgttt tcctatggaa 240
taattaacaa acccaataaa tgtataaata gcatgaaa 278

<210> 391
<211> 578
<212> DNA
<213> Homo sapiens

<400> 391
cggcgctcgg ctcgcaggat ggatcccgta cccgggacag actcggcgcc gctggctggc 60
ctggcctggt cgtcggcctc tgcacccccg ccgcgggggt tcagcgcgat ctcctgcacc 120
gtcgaggggg cacccgccag ctttggcaag agcttcgcgc agaaatctgg ctacttcctg 180
tgccttagtt ctctgggcag cctagagaac ccgcaggaga acgtggtggc cgatatccag 240
atcgtggtgg acaagagccc cctgccgctg ggcttctccc ccgtctgcga ccccatggat 300
tccaaggcct ctgtgtccaa gaagaaacgc atgtgtgtga agctgttgcc cctgggagcc 360
acggacacgg ctgtgtttga tgtccggctg agtgggaaga ccaagacagt gcctggatac 420
cttcgaatag gggacatggg cggctttgcc atctggtgca agaaggccaa ggccccgagg 480
ccagtgccca agccccgagg tctcagccgg gacatgcagg gcctctctct ggatgcagcc 540
agccagccaa gtaagggcgg cctcctggag cggacagc 578

<210> 392
<211> 439
<212> DNA
<213> Homo sapiens

<400> 392
ttcaacaaac cttgtatagt gtatgttttg ccatatttaa tattaatagc agaggaagac 60
tcctttttc atcactgtat gaattttta taatgttttt ttaaaatata tttcatgtat 120
acttataaac taattcacac aagtgtttgt cttagatgat taaggaagac tatatctaga 180
tcatgtctga ttttttattg tgacttctcc agccctggtc tgaatttctt aaggttttat 240
aaacaaatgc tgctatttat tagctgcaag aatgcacttt agaactattt gacaattcag 300
actttcaaaa taaagatgta aatgactggc caataataac cattttagga aggtgttttg 360
aattctgtat gtatatattc actttctgac atttagatat gccaaaagaa ttaaaatcaa 420
aagcactaag aaataaaaa 439

<210> 393
<211> 544
<212> DNA
<213> Homo sapiens

```
<400> 393
tttgaattta caccaagaac ttctcaataa aagaaaatca tgaatgctcc acaatttcaa 60
cataccacaa gagaagttaa tttcttaaca ttgtgttcta tgattatttg taagaccttc 120
accaagttct gatatctttt aaagacatag ttcaaaattg cttttgaaaa tctgtattct 180
tgaaaatatc cttgttgtgt attaggtttt taaataccag ctaaaggatt acctcactga 240
gtcatcagta ccctcctatt cagctcccca agatgatgtg tttttgctta ccctaagaga 300
ggttttcttc ttatttttag ataattcaag tgcttagata aattatgttt tctttaagtg 360
tttatggtaa actcttttaa agaaaattta atatgttata gctgaatctt tttggtaact 420
ttaaatcttt atcatagact ctgtacatat gttcaaatta gctgcttgcc tgatgtgtgt 480
atcatcggtg ggatgacaga acaaacatat ttatgatcat gaataatgtg ctttgtaaaa 540
agat                                                            544


<210> 394
<211> 424
<212> DNA
<213> Homo sapiens


<400> 394
aaacatcatt tagcagcaat gaacctgtca acacatggaa ataaggttta cagtcatgca 60
aatgtccatt taactttgtt tgagccaaac aaatataaca gtaaactaat tagactggct 120
tacatccccg tagacagtga aaccaattat ttcttaaaga agggtttgct tgttttttact 180
ctaggcaaa g gtgcataac ttcttgtaat actcctgaat agttcttcaa atcaggacag 240
ataaagttgg caactgatgg aatagctacc ttgatgtgca aatggttggg tctttaatta 300
ggttcattta tataattgag aaagaagcca gggaatgcat ttgtgcaagg atgattttaa 360
aagaagaggg atggtctgcc ttttaattct gtatgggagg aaaattcata aaaaactgaa 420
aaaa                                                            424


<210> 395
<211> 279
<212> DNA
<213> Homo sapiens


<220>
<221> misc_feature
<222> (1)...(279)
<223> n = A,T,C or G


<400> 395
ttcctatgat nattaaactc attctcaggg ttaagaaagg aatgtaaatt tctgcctcaa 60
tttgcacttc atcaataagt ttttgaagag tgcagatttt tagtcaggtc ttaaaaataa 120
actcacaaat ctggatgcat ttctaaattc tgcaaatgtt tcctgggggtg acttaacaag 180
gaataatccc acaatatacc tagctaccta atacatggag ctggggctca acccactgtt 240
tttaaggatt tgcgcttact tgtggctgan gaaaaataa                       279


<210> 396
<211> 3293
<212> DNA
<213> Homo sapiens


<400> 396
cagccccggg ccaggccgcg gccggggcag gagcgcaggg gctttgttat gcacctaaag 60
ccatattgga agctccagaa gaaagagcac cccccggaag tcagcaggga aacgcagaga 120
actcctatga accaccaaaa ggctgtaaat gatgaaacat gcaaagctag ccacataaca 180
```

```
tcaagtgtct ttccttcagc ctctctcggt aaagcatcat ctcgaaagcc atttgggatc 240
ctttctccaa atgttctgtg cagtatgagt gggaagagtc ctgtagagag cagcttgaat 300
gttaaaacca aaaagaatgc accatctgca acgatccacc agggcgaaga agaaggacca 360
cttgatatct gggctgttgt gaaacctgga aataccaagg aaaaaattgc attctttgca 420
tcccaccagt gtagtaacag gataggatct atgaaaataa aaagttcctg ggatattgat 480
gggagagcta ctaagagaag gaaaaaatca ggggatctta aaaaagccaa ggtacaggtg 540
gaaaggatga gggaggttaa cagcaggtgc taccaacctg agccttttgc atgtggcatt 600
gagcactgtt ctgtgcacta tgtgagtgac agtggggatg gagtctatgc tgggaggcct 660
ctgtcagtta tacagatggt tgccttcttg gagcaaagag ccagtgctct gctagctagc 720
tgttcaaaaa actgcacaaa ctcacctgca attgtgaggt tttctggcca atccagaggt 780
gtgcctgcag tgtctgagtc ctattctgcc ccaggagctt gtgaagaacc cacagaaagg 840
ggaaatcttg aggttggtga accacagagc gaaccagtcc gtgtccttga catggtagcc 900
aagttggagt ctgagtgcct gaagcggcag ggccagcgtg agcctgggag cctctcaagg 960
aataacagct tccgtcgaaa tgtgggcaga gtattgcttg caaatagcac tcaggctgat 1020
gaaggcaaaa caaagaaagg cgtcttggag gcacctgaca ctcaggtgaa tcctgtgggg 1080
tctgtatctg tggattgtgg cccttcaaga gctgatcgtt gttctcctaa ggaggaccag 1140
gcctgggacg gtgcttctca ggactgcccc ccattgccag caggagtgag tttccacata 1200
gacagtgcag agttagagcc gggttcgcaa actgccgtga aaaacagcaa cagatatgat 1260
gtggaaatga cagatgaact cgttgggtta ccttttttcct ctcataccta ttcccaagcc 1320
tctgaattgc ccacagatgc tgttgattgt atgagcagag agcttgtgtc ccttactagc 1380
cgaaatcctg atcaaagaaa agaatctttg tgcattagta tcactgtgtc caaggtagac 1440
aaagaccagc cttccatttt aaactcctgt gaagacccag ttccagggat gttgttttttt 1500
ttgccacctg gtcagcactt gtcagactat tcccagttga atgaaagcac aacaaaagag 1560
tcttcagagg ccagccagct tgaagatgct gctggggggtg acagtgcatc tgaggaaaaa 1620
agtgggtctg ctgagccatt tgtactgcca gcctcttctg tggaaagtac attaccagtg 1680
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atccagcagc tttttggagcc tcagcagtac atggcttttc tgccccacca cattatggta 1800
aaaatcttca ggttacttcc caccaagagt ttagtggccc ttaaatgtac ctgctgctat 1860
ttcaagttta tcattgagta ctacaatatc aggccagcag attctcgctg ggttcgagat 1920
ccacgctata gagaggatcc ttgcaaacag tgcaagaaaa agtatgtgaa aggggatgtg 1980
tccctgtgcc gatggcaccc caagccctat tgccaggcat tgccctatgg gccagggtat 2040
tggatgtgct gccaccggtc tcagaaagga ttccctggct gtaagctggg gcttcatgac 2100
aatcactggg ttcctgcctg ccacagcttt aatcgggcaa tccataagaa agcaaaaggg 2160
actgaagctg aagaggaata ctaaagtcca tgtgagaggc aacaaaagga ccggtttcta 2220
aagctgcaaa acacctagat acaccgttca aatgagcgta gccccctgag tcatcactct 2280
agaagaatct gtacatcatc aggactgcat tgctcaggca ttttctaaac tctaaattta 2340
cgagctgtac aaaaaaattg gtcttgttgt ttatagtggc atctcatgtt tgaacccggg 2400
tggtatccca cagttggatt cagttggctg tgaataactg cctgttttcc taaatcaaac 2460
ccatcctcaa aggatgaaga ctcaccacca tccaggacat tcagaagagt tcactgcaga 2520
tgctgcaggt agtcctcaaa aatgggttcc agaaatgttt tgagcactgg caacatattt 2580
gaaataagtg aatattgtcc tgtgaaaaga atagcaggac ttttagatga aaagtattct 2640
taaaaagaaa agtcaggcac cccaccttag acctcgtatg cttgatcctg tgagattgat 2700
gtttgtggct ggaggtggat ttcatgccct gtggtgttta cagtgtatat aatggttgtg 2760
ttttcatggg gctatgaaag tgcacgttaa acctgagcgc ctttaccttt agatgagtgc 2820
tttggcccct ctgtgaatag cacgattaaa atccagttgt atataatgga cagctaacgg 2880
aacaatataa tcaccacaat gcagctagga tagtgttgcg gctataattt tgtgttttttt 2940
ttttttaatt gtctagtctt aaatttgtac atcttgtata aaatatgaat gtttcccaaa 3000
taaactatga atgtttcctg tataatatat gaatgtttct gagaagaaac tctaaatagt 3060
tgaaaggcta acctgctcaa aggataccaa ataatggttt aactggacaa cctgaaaatt 3120
agcatagaaa acaatccttt gttatatttt agtgatccac aagattgaga aaatattata 3180
tagttagata ataacattct tgtctacttt atcctgtctg gttacaaaat ttttttaaaac 3240
ttaaataaaa acatgcatct taaatggaaa aaaaaaaaaa aaaaaactc gag       3293
```

<210> 397

<211> 727
<212> PRT
<213> Homo sapiens

<400> 397
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Gln Pro Arg Ala Arg Pro Arg Pro Gly Gln Glu Arg Arg Gly Phe Val
                  5                   10                      15
Met His Leu Lys Pro Tyr Trp Lys Leu Gln Lys Lys Glu His Pro Pro
                 20                   25                   30
Glu Val Ser Arg Glu Thr Gln Arg Thr Pro Met Asn His Gln Lys Ala
             35                   40                   45
Val Asn Asp Glu Thr Cys Lys Ala Ser His Ile Thr Ser Ser Val Phe
         50                   55                   60
Pro Ser Ala Ser Leu Gly Lys Ala Ser Ser Arg Lys Pro Phe Gly Ile
65                   70                   75                   80
Leu Ser Pro Asn Val Leu Cys Ser Met Ser Gly Lys Ser Pro Val Glu
                 85                   90                   95
Ser Ser Leu Asn Val Lys Thr Lys Lys Asn Ala Pro Ser Ala Thr Ile
                100                  105                  110
His Gln Gly Glu Glu Glu Gly Pro Leu Asp Ile Trp Ala Val Val Lys
                115                  120                  125
Pro Gly Asn Thr Lys Glu Lys Ile Ala Phe Phe Ala Ser His Gln Cys
         130                  135                  140
Ser Asn Arg Ile Gly Ser Met Lys Ile Lys Ser Ser Trp Asp Ile Asp
145                  150                  155                  160
Gly Arg Ala Thr Lys Arg Arg Lys Lys Ser Gly Asp Leu Lys Lys Ala
                 165                  170                  175
Lys Val Gln Val Glu Arg Met Arg Glu Val Asn Ser Arg Cys Tyr Gln
                180                  185                  190
Pro Glu Pro Phe Ala Cys Gly Ile Glu His Cys Ser Val His Tyr Val
                195                  200                  205
Ser Asp Ser Gly Asp Gly Val Tyr Ala Gly Arg Pro Leu Ser Val Ile
         210                  215                  220
Gln Met Val Ala Phe Leu Glu Gln Arg Ala Ser Ala Leu Leu Ala Ser
225                  230                  235                  240
Cys Ser Lys Asn Cys Thr Asn Ser Pro Ala Ile Val Arg Phe Ser Gly
                 245                  250                  255
Gln Ser Arg Gly Val Pro Ala Val Ser Glu Ser Tyr Ser Ala Pro Gly
                260                  265                  270
Ala Cys Glu Glu Pro Thr Glu Arg Gly Asn Leu Glu Val Gly Glu Pro
         275                  280                  285
Gln Ser Glu Pro Val Arg Val Leu Asp Met Val Ala Lys Leu Glu Ser
         290                  295                  300
Glu Cys Leu Lys Arg Gln Gly Gln Arg Glu Pro Gly Ser Leu Ser Arg
305                  310                  315                  320
Asn Asn Ser Phe Arg Arg Asn Val Gly Arg Val Leu Leu Ala Asn Ser
                 325                  330                  335
Thr Gln Ala Asp Glu Gly Lys Thr Lys Lys Gly Val Leu Glu Ala Pro
         340                  345                  350
Asp Thr Gln Val Asn Pro Val Gly Ser Val Ser Val Asp Cys Gly Pro
         355                  360                  365
Ser Arg Ala Asp Arg Cys Ser Pro Lys Glu Asp Gln Ala Trp Asp Gly
         370                  375                  380
Ala Ser Gln Asp Cys Pro Pro Leu Pro Ala Gly Val Ser Phe His Ile
```

```
385                      390                      395                      400
Asp Ser Ala Glu Leu Glu Pro Gly Ser Gln Thr Ala Val Lys Asn Ser
                405                      410                      415
Asn Arg Tyr Asp Val Glu Met Thr Asp Glu Leu Val Gly Leu Pro Phe
                420                      425                      430
Ser Ser His Thr Tyr Ser Gln Ala Ser Glu Leu Pro Thr Asp Ala Val
                435                      440                      445
Asp Cys Met Ser Arg Glu Leu Val Ser Leu Thr Ser Arg Asn Pro Asp
    450                      455                      460
Gln Arg Lys Glu Ser Leu Cys Ile Ser Ile Thr Val Ser Lys Val Asp
465                      470                      475                      480
Lys Asp Gln Pro Ser Ile Leu Asn Ser Cys Glu Asp Pro Val Pro Gly
                485                      490                      495
Met Leu Phe Phe Leu Pro Pro Gly Gln His Leu Ser Asp Tyr Ser Gln
                500                      505                      510
Leu Asn Glu Ser Thr Thr Lys Glu Ser Ser Glu Ala Ser Gln Leu Glu
                515                      520                      525
Asp Ala Ala Gly Gly Asp Ser Ala Ser Glu Glu Lys Ser Gly Ser Ala
                530                      535                      540
Glu Pro Phe Val Leu Pro Ala Ser Ser Val Glu Ser Thr Leu Pro Val
545                      550                      555                      560
Leu Glu Ala Ser Ser Trp Lys Lys Gln Val Ser His Asp Phe Leu Glu
                565                      570                      575
Thr Arg Phe Lys Ile Gln Gln Leu Leu Glu Pro Gln Gln Tyr Met Ala
                580                      585                      590
Phe Leu Pro His His Ile Met Val Lys Ile Phe Arg Leu Leu Pro Thr
                595                      600                      605
Lys Ser Leu Val Ala Leu Lys Cys Thr Cys Cys Tyr Phe Lys Phe Ile
                610                      615                      620
Ile Glu Tyr Tyr Asn Ile Arg Pro Ala Asp Ser Arg Trp Val Arg Asp
625                      630                      635                      640
Pro Arg Tyr Arg Glu Asp Pro Cys Lys Gln Cys Lys Lys Lys Tyr Val
                645                      650                      655
Lys Gly Asp Val Ser Leu Cys Arg Trp His Pro Lys Pro Tyr Cys Gln
                660                      665                      670
Ala Leu Pro Tyr Gly Pro Gly Tyr Trp Met Cys Cys His Arg Ser Gln
                675                      680                      685
Lys Gly Phe Pro Gly Cys Lys Leu Gly Leu His Asp Asn His Trp Val
                690                      695                      700
Pro Ala Cys His Ser Phe Asn Arg Ala Ile His Lys Lys Ala Lys Gly
705                      710                      715                      720
Thr Glu Ala Glu Glu Glu Tyr
                725
```

<210> 398
<211> 403
<212> DNA
<213> Homo sapiens

<400> 398
ccagtgtggt ggaattccag cctcgtgccg ggagtcgccg cattgtggtc cgcttctctg 60
cactatgtcg ggtggcctcc tgaaggcgct gcgcagcgac tcctacgtgg agctgagcca 120
gtaccgggac cagcacttcc ggggtgacaa tgaagaacaa gaaaaattac tgaagaaaag 180

```
ctgtacgtta tatgttggaa atctttcttt ttacacaact gaagaacaaa tctatgaact 240
cttcagcaaa agtggtgaca taaagaaaat cattatgggt ctggataaaa tgaagaaaac 300
agcatgtgga ttctgttttg tggaatatta ctcacgcgca gatgcggaaa acgccatgcg 360
gtacataaat gggacgcgtc tggatgaccg aatcattcgc aca              403
```

```
<210> 399
<211> 403
<212> DNA
<213> Homo sapiens
```

```
<400> 399
ttttgatgct ttctttcatg ggaatagtca cttttttatt tagtaaatcg cattgctgga 60
accaccaagg agtgtggaat gtccttgagt gtattattta tgcaagtcac agtcacgttg 120
ccatcatggc agctatgtga aacactaata aatgtgtttt tacttttat tcccgttaaa 180
actgatgtaa aacaggataa aggcttgtta tagtcactta taagtatctg ggtctaagta 240
atttccttag atgtttctaa agaaacattt tcagctttgc tcccattatg attccaataa 300
ggaacgcttt cctagtgcaa ttttaggagt aaagtttgaa gagataaaaa tagccaaaga 360
taggagacgt ctgaattttg aatgataaac agtgatgttt taa              403
```

```
<210> 400
<211> 283
<212> DNA
<213> Homo sapiens
```

```
<400> 400
ttatttttcc cctcaaattc atgattttta cgtctgttac aaagggaatt ttgctgatag 60
ctctttgggt cccactgttc cattttatgc taatagattc cattctaggg cccagccgtc 120
tcttgactga tggtgttccc tttaaccctt ggcatgtata atagaatttt ggtgaatgaa 180
agaacccaaa taggccagat agtccccca ggccctgata tccataaaag gcttgggaat 240
gcattatgta attgtcctta gtcttttgt tgttttagaa aaa              283
```

```
<210> 401
<211> 303
<212> DNA
<213> Homo sapiens
```

```
<400> 401
cataaagggt gtgcgcgtct tcgacgtggc ggtcttggcg ccactgctgc gagacccggc 60
cctggacctc aaggtcatcc acttggtgcg tgatccccgc gcggtggcga gttcacggat 120
ccgctcgcgc cacggcctca tccgtgagag cctacaggtg gtgcgcagcc gagacccgcg 180
agctcaccgc atgcccttct tggaggccgc gggccacaag cttggcgcca agaaggaggg 240
cgtgggcggc cccgcagact accacgctct gggcgctatg gaggtcatct gcaatagtat 300
ggc                                                          303
```

```
<210> 402
<211> 473
<212> DNA
<213> Homo sapiens
```

```
<400> 402
ccaacacagt cagaaacatt gttttgaatc ctctgtaaac caaggcatta atcttaataa 60
accaggatcc atttaggtac cacttgatat aaaaaggata tccataatga atattttata 120
ctgcatcctt tacattagcc actaaatacg ttattgcttg atgaagacct ttcacagaat 180
cctatggatt gcagcatttc acttggctac ttcatcccca tgccttaaag aggggcagtt 240
```

```
tctcaaaagc agaaacatgc cgccagttct caagttttcc tcctaactcc atttgaatgt 300
aagggcagct ggcccccaat gtggggaggt ccgaacattt tctgaattcc cattttcttg 360
ttcgcggcta aatgacagtt tctgtcatta cttagattcc gatctttccc aaaggtgttg 420
atttacaaag aggccagcta atagcagaaa tcatgaccct gaaagagaga tga         473
```

```
<210> 403
<211> 513
<212> DNA
<213> Homo sapiens
```

```
<400> 403
ggcattaact tttagaattt gggctggtga gattaatttt ttttaatatc ccagctagag 60
atatggcctt taactgacct aaagaggtgt gttgtgattt aattttttcc cgttcctttt 120
tcttcagtaa acccaacaat agtctaacct taaaaattga gttgatgtcc ttataggtca 180
ctacccctaa ataaacctga agcaggtgtt ttctcttgga catactaaaa aatacctaaa 240
aggaagctta gatggtctgt gacacaaaaa attcaattac tgtcatctaa tgccagctgt 300
taaaagtgtg gccactgagc atttgatttt ataggaaaaa atagtatttt tgagaataac 360
atagctgtgc tattgcacat ctgttggagg acatcccaga tttgcttata ctcagtgcct 420
gtgatattga gtttaaggat ttgaggcagg ggtaattatt aaacatattg cttctattct 480
tggaaaaata gaagtgtaaa atgttaataa tac                                 513
```

```
<210> 404
<211> 533
<212> DNA
<213> Homo sapiens
```

```
<400> 404
ccagtgtggt ggaattcgcg gtaggctggg accataacac aagcatgact atatgaagga 60
agaggaaggt tttcctgaag atgaggcgac tgaatcggaa aaaaacttta agtttggtaa 120
aagagttgga tgcctttccg aaggttcctg agagctatgt agagacttca gccagtggag 180
gtacagtttc tctaatagca tttacaacta tggctttatt aaccataatg gaattctcag 240
tatatcaaga tacatggatg aagtatgaat acgaagtaga caaggatttt tctagcaaat 300
taagaattaa tatagatatt actgttgcca tgaagtgtca atatgttgga gcggatgtat 360
tggatttagc agaaacaatg gttgcatctg cagatggttt agtttatgaa ccaacagtat 420
ttgatctttc accacagcag aaagagtggc agaggatgct gcagctgatt cagagtaggc 480
tacaagaaga gcattcactt caagatgtga tatttaaaag tgcttttaaa agt         533
```

```
<210> 405
<211> 513
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (1)...(513)
<223> n = A,T,C or G
```

```
<400> 405
ccagngnggt ggaattcctt agacatattc tgagcctaca gcagaggaac ctccagtctc 60
agcaccatga atcaaactgc cattctgatt tgctgcctta tctttctgac tctaagtggc 120
attcaaggag tacctctctc tagaactgta cgctgtacct gcatcagcat tagtaatcaa 180
cctgttaatc caaggtcttt agaaaaactt gaaattattc ctgcaagcca attttgtcca 240
cgtgttgaga tcattgctac aatgaaaaag aagggtgaga agagatgtct gaatccagaa 300
tcgaaggcca tcaagaattt actgaaagca gttagcaagg aaaggtctaa aagatctcct 360
```

```
taaaaccaga gggggagcaaa atcgatgcag tgcttccaag gatggaccac acagaggctg 420
cctctcccat cacttcccta catggagtat atgtcaagcc ataattgttc ttagtttgca 480
gttacactaa aaggtgacca atcatggtca cca                               513
```

<210> 406
<211> 483
<212> DNA
<213> Homo sapiens

<400> 406
```
atataccatt taatacattt acactttctt atttaagaag atattgaatg caaaataatt 60
gacatataga actttacaaa catatgtcca aggactctaa attgagactc ttccacatgt 120
acaatctcat catcctgaag cctataatga agaaaaagat ctagaaactg agttgtggag 180
ctgactctaa tcaaatgtga tgattggaat tagaccattt ggcctttgaa cttttcatagg 240
aaaaatgacc caacatttct tagcatgagc tacctcatct ctagaagctg ggatggactt 300
actattcttg tttatatttt agatactgaa aggtgctatg cttctgttat tattccaaga 360
ctggagatag gcagggctaa aaaggtatta ttatttttcc tttaatgatg gtgctaaaat 420
tcttcctata aaattcctta aaaataaaga tggtttaatc actaccattg tgaaaacata 480
act                                                               483
```

<210> 407
<211> 241
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(241)
<223> n = A,T,C or G

<400> 407
```
tcacaaagnc cactttactc aaattggtga acagngnata ggaagaagcc agcaggagct 60
ctgactaagg ttgacataat angtccacct cccattactt tgatatctga tcaaatgtat 120
agactnggct ttgttttttg tgctattagg aaattctgat gagcattact attcactgat 180
gcagaaagac gttcttttgc ataaaagact tttttaaca ctttggactt ctctgaaata 240
t                                                                 241
```

<210> 408
<211> 213
<212> DNA
<213> Homo sapiens

<400> 408
```
ccagtgtggt ggaattcaca tgatacagcc actgggctta tacagtatgc attggaccag 60
ggcgtgaacg tcacccaggt attcgtggac accgtaggga tgccagagac ataccaggcg 120
cggttgcagc aaagtttttcc cgggattgag gggaccggcc aaggccaaag cagatgccct 180
ctacccggtg gttagtgctg ccagcatctg tgc                               213
```

<210> 409
<211> 413
<212> DNA
<213> Homo sapiens

<400> 409

```
tcagatgagt ggctgctgaa ggggccccct tgtcattttc attataaccc aatttccact 60
tatttgaact cttaagtcat aaatgtataa tgacttatga attagcacag ttaagttgac 120
actagaaact gcccatttct gtattacact atcaaatagg aaacattgga aagatgggga 180
aaaaaatctt attttaaaat ggcttagaaa gttttcagat tactttgaaa attctaaact 240
tctttctgtt tccaaaactt gaaaatatgt agatggactc atgcattaag actgttttca 300
aagctttcct cacattttta aagtgtgatt ttcctttta tatacatatt tattttcttt 360
aaagcagcta tatcccaacc catgactttg gagatatacc tataaaacca ata       413
```

`<210> 410`
`<211> 153`
`<212> DNA`
`<213> Homo sapiens`

`<220>`
`<221> misc_feature`
`<222> (1)...(153)`
`<223> n = A,T,C or G`

`<400> 410`

```
gcaaaccacg actgaagaaa gacgaaaagt gggaaataac ttgcaacgtc tgttagagat 60
ggttgctaca catgttgggt ctgtaganaa acatcttgag gagcagattc ctaaagttga 120
taganaatat gaagaatgca tgtcaaaaga tct                               153
```

`<210> 411`
`<211> 253`
`<212> DNA`
`<213> Homo sapiens`

`<400> 411`

```
cagtgtggtg gaattcgtcg gcgaaagcgg cgggaagttc gtactgggca gaacgcgacg 60
ggtctgcggc ttaggtgaaa atgcctcgtg taaaagcagc tcaagctgga agacagagct 120
ctgcaaagag acatcttgca gaacaatttg caagttggag agataataac tgacatggca 180
aaaaaggaat ggaaagtagg attacccatt ggccaaggag gctttggctg tatatatctt 240
gctgatatga att                                                     253
```

`<210> 412`
`<211> 3079`
`<212> DNA`
`<213> Homo sapiens`

`<400> 412`

```
gaagtgagta gtgggggtgc cagaccaggt gcgtctgccg ctggattgtg ataggaagca 60
gagtgttcgt gtgaaagatg gatactatga tgctgaatgt gcggaatctg tttgagcagc 120
ttgtgcgccg ggtggagatt ctcagtgaag gaaatgaagt ccaatttatc cagttggcga 180
aggactttga ggatttccgt aaaaagtggc agaggactga ccatgagctg gggaaataca 240
aggatctttt gatgaaagca gagactgagc gaagtgctct ggatgttaag ctgaagcatg 300
cacgtaatca ggtggatgta gagatcaaac ggagacagag agctgaggct gactgcgaaa 360
agctggaacg acagattcag ctgattcgag agatgctcat gtgtgacaca tctggcagca 420
ttcaactaag cgaggagcaa aaatcagctc tggctttct caacagaggc caaccatcca 480
gcagcaatgc tgggaacaaa agactatcaa ccattgatga atctggttcc attttatcac 540
atatcagctt tgacaagact gatgaatcac tggattggga ctcttctttg gtgaagactt 600
tcaaactgaa gaagagagaa aagaggcgct ctactagccg acagtttgtt gatggtcccc 660
ctggacctgt aaagaaaact cgttccattg gctctgcagt agaccagggg aatgaatcca 720
tagttgcaaa aactacagtg actgttccca atgatggcgg gcccatcgaa gctgtgtcca 780
```

```
ctattgagac tgtgccatat tggaccagga gccgaaggaa aacaggtact ttacaacctt 840
ggaacagtga ctccaccctg aacagcaggc agctggagcc aagaactgag acagacagtg 900
tgggcacgcc acagagtaat ggagggatgc gcctgcatga ctttgtttct aagacggtta 960
ttaaacctga atcctgtgtt ccatgtggaa agcggataaa atttggcaaa ttatctctga 1020
agtgtcgaga ctgtcgtgtg gtctctcatc cagaatgtcg ggaccgctgt ccccttccct 1080
gcattcctac cctgatagga acacctgtca agattggaga gggaatgctg gcagactttg 1140
tgtcccagac ttctccaatg atcccctcca ttgttgtgca ttgtgtaaat gagattgagc 1200
aaagaggtct gactgagaca ggcctgtata ggatctctgg ctgtgaccgc acagtaaaag 1260
agctgaaaga gaaattcctc agagtgaaaa ctgtacccct cctcagcaaa gtggatgata 1320
tccatgctat ctgtagcctt ctaaaagact ttcttcgaaa cctcaaagaa cctcttctga 1380
cctttcgcct taacagagcc tttatggaag cagcagaaat cacagatgaa gacaacagca 1440
tagctgccat gtaccaagct gttggtgaac tgccccaggc caacagggac acattagctt 1500
tcctcatgat ccacttgcag agagtggctc agagtccaca tactaaaatg gatgttgcca 1560
atctggctaa agtctttggc cctacaatag tggcccatgc tgtgcccaat ccagacccag 1620
tgacaatgtt acaggacatc aagcgtcaac caaggtggt tgagcgcctg ctttccttgc 1680
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tgggacctgt gaccactcct gaacatcagc ttctcaagac tccttcatct agttccctgt 1860
cacagagagt ccgttccacc ctcaccaaga cactcctag atttgggagc aaaagcaagt 1920
ctgccactaa cctaggacga caaggcaact tttttgcttc tccaatgctc aagtgaagtc 1980
acatctgcct gttacttccc agcattgact gactataaga aaggacacat ctgtactctg 2040
ctctgcagcc tcctgtactc attactactt ttagcattct ccaggctttt actcaagttt 2100
aattgtgcat gagggtttta ttaaaactat atatatctcc ccttccttct cctcaagtca 2160
cataatatca gcactttgtg ctggtcattg ttgggagctt ttagatgaga catctttcca 2220
ggggtagaag ggttagtatg gaattggttg tgattctttt tggggaaggg ggttattgtt 2280
cctttggctt aaagccaaat gctgctcata gaatgatctt tctctagttt catttagaac 2340
tgatttccgt gagacaatga cagaaaccct acctatctga taagattagc ttgtctcagg 2400
gtgggaagtg ggagggcagg gcaaagaaag gattagacca gaggatttag gatgcctcct 2460
tctaagaacc agaagttctc attccccatt atgaactgag ctataatatg gagctttcat 2520
aaaaatggga tgcattgagg acagaactag tgatgggagt atgcgtagct ttgatttgga 2580
tgattaggtc tttaatagtg ttgagtggca caaccttgta aatgtgaaag tacaactcgt 2640
atttatctct gatgtgccgc tggctgaact ttgggttcat ttggggtcaa agccagtttt 2700
tcttttaaaa ttgaattcat tctgatgctt ggcccccata cccccaacct tgtccagtgg 2760
agcccaactt ctaaaggtca atatatcatc ctttggcatc ccaactaaca ataaagagta 2820
ggctataagg gaagattgtc aatattttgt ggtaagaaaa gctacagtca ttttttcttt 2880
gcactttgga tgctgaaatt tttcccatgg aacatagcca catctagata gatgtgagct 2940
ttttcttctg ttaaaattat tcttaatgtc tgtaaaacg attttcttct gtagaatgtt 3000
tgacttcgta ttgaccctta tctgtaaaac acctatttgg gataatattt ggaaaaaagt 3060
aaatagcttt ttcaaaatg                                                3079
```

<210> 413
<211> 632
<212> PRT
<213> Homo sapiens

<400> 413
```
Met Asp Thr Met Met Leu Asn Val Arg Asn Leu Phe Glu Gln Leu Val
                  5                   10                  15
Arg Arg Val Glu Ile Leu Ser Glu Gly Asn Glu Val Gln Phe Ile Gln
              20                  25                  30
Leu Ala Lys Asp Phe Glu Asp Phe Arg Lys Lys Trp Gln Arg Thr Asp
          35                  40                  45
His Glu Leu Gly Lys Tyr Lys Asp Leu Leu Met Lys Ala Glu Thr Glu
      50                  55                  60
```

```
Arg Ser Ala Leu Asp Val Lys Leu Lys His Ala Arg Asn Gln Val Asp
65                  70                  75                      80
Val Glu Ile Lys Arg Arg Gln Arg Ala Glu Ala Asp Cys Glu Lys Leu
                85                  90                  95
Glu Arg Gln Ile Gln Leu Ile Arg Glu Met Leu Met Cys Asp Thr Ser
            100                 105                 110
Gly Ser Ile Gln Leu Ser Glu Glu Gln Lys Ser Ala Leu Ala Phe Leu
            115                 120                 125
Asn Arg Gly Gln Pro Ser Ser Ser Asn Ala Gly Asn Lys Arg Leu Ser
            130                 135                 140
Thr Ile Asp Glu Ser Gly Ser Ile Leu Ser His Ile Ser Phe Asp Lys
145                 150                 155                 160
Thr Asp Glu Ser Leu Asp Trp Asp Ser Ser Leu Val Lys Thr Phe Lys
                165                 170                 175
Leu Lys Lys Arg Glu Lys Arg Arg Ser Thr Ser Arg Gln Phe Val Asp
            180                 185                 190
Gly Pro Pro Gly Pro Val Lys Lys Thr Arg Ser Ile Gly Ser Ala Val
            195                 200                 205
Asp Gln Gly Asn Glu Ser Ile Val Ala Lys Thr Thr Val Thr Val Pro
    210                 215                 220
Asn Asp Gly Gly Pro Ile Glu Ala Val Ser Thr Ile Glu Thr Val Pro
225                 230                 235                 240
Tyr Trp Thr Arg Ser Arg Arg Lys Thr Gly Thr Leu Gln Pro Trp Asn
                245                 250                 255
Ser Asp Ser Thr Leu Asn Ser Arg Gln Leu Glu Pro Arg Thr Glu Thr
            260                 265                 270
Asp Ser Val Gly Thr Pro Gln Ser Asn Gly Gly Met Arg Leu His Asp
            275                 280                 285
Phe Val Ser Lys Thr Val Ile Lys Pro Glu Ser Cys Val Pro Cys Gly
    290                 295                 300
Lys Arg Ile Lys Phe Gly Lys Leu Ser Leu Lys Cys Arg Asp Cys Arg
305                 310                 315                 320
Val Val Ser His Pro Glu Cys Arg Asp Arg Cys Pro Leu Pro Cys Ile
                325                 330                 335
Pro Thr Leu Ile Gly Thr Pro Val Lys Ile Gly Glu Gly Met Leu Ala
            340                 345                 350
Asp Phe Val Ser Gln Thr Ser Pro Met Ile Pro Ser Ile Val Val His
            355                 360                 365
Cys Val Asn Glu Ile Glu Gln Arg Gly Leu Thr Glu Thr Gly Leu Tyr
    370                 375                 380
Arg Ile Ser Gly Cys Asp Arg Thr Val Lys Glu Leu Lys Glu Lys Phe
385                 390                 395                 400
Leu Arg Val Lys Thr Val Pro Leu Leu Ser Lys Val Asp Asp Ile His
                405                 410                 415
Ala Ile Cys Ser Leu Leu Lys Asp Phe Leu Arg Asn Leu Lys Glu Pro
            420                 425                 430
Leu Leu Thr Phe Arg Leu Asn Arg Ala Phe Met Glu Ala Ala Glu Ile
            435                 440                 445
Thr Asp Glu Asp Asn Ser Ile Ala Ala Met Tyr Gln Ala Val Gly Glu
    450                 455                 460
Leu Pro Gln Ala Asn Arg Asp Thr Leu Ala Phe Leu Met Ile His Leu
465                 470                 475                 480
Gln Arg Val Ala Gln Ser Pro His Thr Lys Met Asp Val Ala Asn Leu
            485                 490                 495
```

```
Ala Lys Val Phe Gly Pro Thr Ile Val Ala His Ala Val Pro Asn Pro
            500             505             510
Asp Pro Val Thr Met Leu Gln Asp Ile Lys Arg Gln Pro Lys Val Val
            515             520             525
Glu Arg Leu Leu Ser Leu Pro Leu Glu Tyr Trp Ser Gln Phe Met Met
    530             535             540
Val Glu Gln Glu Asn Ile Asp Pro Leu His Val Ile Glu Asn Ser Asn
545             550             555             560
Ala Phe Ser Thr Pro Gln Thr Pro Asp Ile Lys Val Ser Leu Leu Gly
            565             570             575
Pro Val Thr Thr Pro Glu His Gln Leu Leu Lys Thr Pro Ser Ser Ser
            580             585             590
Ser Leu Ser Gln Arg Val Arg Ser Thr Leu Thr Lys Asn Thr Pro Arg
        595             600             605
Phe Gly Ser Lys Ser Lys Ser Ala Thr Asn Leu Gly Arg Gln Gly Asn
    610             615             620
Phe Phe Ala Ser Pro Met Leu Lys
625             630
```

```
<210> 414
<211> 3061
<212> DNA
<213> Homo sapiens

<400> 414
cggcacgagg cgactttggt ggaggtagtt ctttggcagc gggcatggcg ggtaccgtgg 60
tgctggacga tgtggagctg cgggaggctc agagagatta cctggacttc ctggacgacg 120
aggaagacca gggaatttat cagagcaaag ttcgggagct gatcagtgac aaccaatacc 180
ggctgattgt caatgtgaat gacctgcgca ggaaaaacga gaagagggct aaccggcttc 240
tgaacaatgc ctttgaggag ctggttgcct ccagcgggc cttaaaggat tttgtggcct 300
ccattgatgc tacctatgcc aagcagtatg aggagttcta cgtaggactg gaaggcagct 360
ttggctccaa gcacgtctcc ccgcggactc ttacctcctg cttcctcagc tgtgtggtct 420
gtgtggaggg cattgtcact aaatgttctc tagttcgtcc caaagtcgtc cgcagtgtcc 480
actactgtcc tgctactaag aagaccatag agcgacgtta ttctgatctc accaccctgg 540
tggcctttcc ctccagctct gtctatccta ccaaggatga ggagaacaat ccccttgaga 600
cagaatatgg cctttctgtc tacaaggatc accagaccat caccatccag gagatgccgg 660
agaaggcccc agccggccag ctcccccgct ctgtggacgt cattctggat gatgacttgg 720
tggataaagc gaagcctggt gaccgggttc aggtggtggg aacctaccgt tgccttcctg 780
gaaagaaggg aggctacacc tctgggacct tcaggactgt cctgattgcc tgtaatgtta 840
agcagatgag caaggatgct cagccctctt tctctgctga ggatatagcc aagatcaaga 900
agttcagtaa aacccgatcc aaggatatct ttgaccagct ggccaagtca ttggccccaa 960
gtatccatgg gcatgactat gtcaagaaag caatcctctg cttgctcttg ggaggggtgg 1020
aacgagacct agaaaatggc agccacatcc gtggggacat caatattctt ctaataggag 1080
acccatccgt tgccaagtct cagcttctgc ggtatgtgct ttgcactgca ccccgagcta 1140
tccccaccac tggccggggc tcctctggag tgggtctgac ggctgctgtc accacagacc 1200
aggaaacagg agagcgccgt ctggaagcag gggccatggt cctggctgac cgaggcgtgg 1260
tttgcattga tgaatttgac aaaatgtctg acatggatcg cacagccatc catgaagtga 1320
tggagcaggg tcgagtgacc attgccaagg ctggcatcca tgctcggctg aatgcccgct 1380
gcagtgtttt ggcagctgcc aaccctgtct acggcaggta tgaccagtat aagactccaa 1440
tggagaacat tgggctacag gactcactgc tgtcacgatt tgacttgctc ttcatcatgc 1500
tggatcagat ggatcctgag caggatcggg agatctcaga ccatgtcctt cggatgcacc 1560
gttacagagc acctggggag caggatggcg atgctatgcc cttgggtagt gctgtggata 1620
tcctggccac agatgatccc aactttagcc aggaagatca gcaggacacc cagatttatg 1680
```

```
agaagcatga caaccttcta catgggacca agaagaaaaa ggagaagatg gtgagtgcag 1740
cattcatgaa gaagtacatc catgtggcca aaatcatcaa gcctgtcctg acacaggagt 1800
cggccaccta cattgcagaa gagtattcac gcctgcgcag ccaggatagc atgagctcag 1860
acaccgccag gacatctcca gttacagccc gaacactgga aactctgatt cgactggcca 1920
cagcccatgc gaaggcccgc atgagcaaga ctgtggacct gcaggatgca gaggaagctg 1980
tggagttggt ccagtatgct tactttaaga aggttctgga gaaggagaag aaacgtaaga 2040
agcgaagtga ggatgaatca gagacagaag atgaagagga gaaaagccaa gaggaccagg 2100
agcagaagag gaagagaagg aagactcgcc agccagatgc caaagatggg gattcatacg 2160
accccctatga cttcagtgac acagaggagg aaatgcctca agtacacact ccaaagacgg 2220
cagactcaca ggagaccaag gaatcccaga aagtggagtt gagtgaatcc aggttgaagg 2280
cattcaaggt ggccctcttg gatgtgttcc gggaagctca tgcgcagtca atcggcatga 2340
atcgcctcac agaatccatc aaccgggaca gcgaagagcc cttctcttca gttgagatcc 2400
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gttccaattg gtggagagaa gctctgaggc acgtcatgca ggtcaagaaa gctttctttg 2940
cagtagcacc agttaaggtg aatatgtatt gtatcacaaa acaaacccaa tatccagatg 3000
aatatccgag atgttgaata aacttagcca tttcgtacaa aaaaggggg gcccggtaaa 3060
c                                                                  3061
```

<210> 415
<211> 732
<212> DNA
<213> Homo sapiens

<400> 415
```
tgctgcgaac cacgtgggtc ccgggcgcgt ttcgggtgct ggcggctgca gccggagttc 60
aaacctaagc agctggaagg aaccatggcc aactgtgagc gtaccttcat tgcgatcaaa 120
ccagatgggg tccagcgggg tcttgtggga gagattatca agcgttttga gcagaaagga 180
ttccgccttg ttggtctgaa attcatgcaa gcttccgaag atcttctcaa ggaacactac 240
gttgacctga aggaccgtcc attctttgcc ggcctggtga atacatgca ctcaggccg 300
gtagttgcca tggtctggga ggggctgaat gtggtgaaga cgggccgagt catgctcggg 360
gagaccaacc ctgcagactc caagcctggg accatccgtg gagacttctg catacaagtt 420
ggcaggaaca ttatacatgg cagtgattct gtggagagtg cagagaagga gatcggcttg 480
tggtttcacc ctgaggaact ggtagattac acgagctgtg ctcagaactg gatctatgaa 540
tgacaggagg gcagaccaca ttgctttttca catccatttc ccctccttcc catgggcaga 600
ggaccaggct gtaggaaatc tagttatttta caggaacttc atcataattt ggagggaagc 660
tcttggagct gtgagttctc cctgtacagt gttaccatcc ccgaccatct gattaaaatg 720
cttcctccca gc                                                      732
```

<210> 416
<211> 2846
<212> DNA
<213> Homo sapiens

<400> 416
```
gactgagcga agtgctctgg atgttaagct gaagcatgca cgtaatcagg tggatgtaga 60
gatcaaacgg agacagagag ctgaggctga ctgcgaaaag ctggaacgac agattcagct 120
gattcgagag atgctcatgt gtgacacatc tggcagcatt caactaagcg aggagcaaaa 180
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<213> Homo sapiens


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<211> 2690
<212> DNA
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gttctctact tgcaagcctc aaagagagaa agtttcgtta tattaaaaca cttaggtaac 3060
tttttcggtct ttcccatttc tacctaagtc agctttcatc tttgtggatg gtgtctcctt 3120
tactaaataa gaaaataaca aagcccttat tctcttttttt tcttgtcctc attcttgcct 3180
tgagttccag ttcctctttg gtgtacagac ttcttggtac ccagtcacct ctgtcttcag 3240
caccctcata agtcgtcact aatacacagt tttgtacatg taacattaaa ggcataaatg 3300
act                                                                 3303
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<210> 422
<211> 1315

<212> DNA
<213> Homo sapiens

<400> 422
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gcggggcctg cacgttgact gtgggaaact cggaaacaag ctcacatctt cctgtgggaa 120
accttctagc aacaggatga gtctgcagtg gactgcagtt gccaccttcc tctatgcgga 180
ggtctttgtt gtgttgcttc tctgcattcc cttcatttct cctaaaagat ggcagaagat 240
tttcaagtcc cggctggtgg agttgttagt gtcctatggc aacaccttct ttgtggttct 300
cattgtcatc cttgtgctgt tggtcatcga tgccgtgcgc gaaattcgga agtatgatga 360
tgtgacggaa aaggtgaacc tccagaacaa tcccggggcc atggagcact ccacatgaa 420
gctttttccgt gcccagagga atctctacat tgctggcttt tccttgctgc tgtccttcct 480
gcttagacgc ctggtgactc tcatttcgca gcaggccacg ctgctggcct ccaatgaagc 540
ctttaaaaag caggcggaga gtgctagtga ggcggccaag aagtacatgg aggagaatga 600
ccagctcaag aagggagctg ctgttgacgg aggcaagttg gatgtcggga atgctgaggt 660
gaagttggag gaagagaaca ggagcctgaa ggctgacctg cagaagctaa aggacgagct 720
ggccagcact aagcaaaaac tagagaaagc tgaaaaccag gttctggcca tgcggaagca 780
gtctgagggc ctcaccaagg agtacgaccg cttgctggag gagcacgcaa agctgcaggc 840
tgcagtagat ggtcccatgg acaagaagga agagtaaggg cctccttcct cccctgcctg 900
cagctggctt ccacctggca cgtgcctgct gcttcctgag agcccggcct ctccctccag 960
tacttctgtt tgtgcccttc tgcttccccc attcccttcc acagctcata gctcgtcatc 1020
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atgcgtttgc tgtcatcctg cttggcctgg ccaggcctgg cacagccttg gcttccacgc 1140
ctgagcgtgg agagcacgag ttagttgtag tccggcttgc ggtggggctg acttcctgtt 1200
ggtttgagcc ccttttttgtt ttgccctctg ggtgttttct ttggtcccgc aggagggtgg 1260
gtggagcagg tggactggag tttctcttga gggcaataaa agttgtcatg gtgtg 1315

<210> 423
<211> 2294
<212> DNA
<213> Homo sapiens

<400> 423
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tgggtcgggg atcggtcgcc tgagaggtat cacctcttct gggctcaaga tggacaacaa 120
gaagcgcctg gcctacgcca tcatccagtt cctgcatgac cagctccggc acggggggcct 180
ctcgtccgat gctcaggaga gcttggaagt cgccatccag tgcctggaga ctgcgtttgg 240
ggtgacggta gaagacagtg accttgcgct ccctcagact ctgccggaga tatttgaagc 300
ggctgccacg ggcaaggaga tgccgcagga cctgaggagc cccgcgcgaa ccccgccttc 360
cgaggaggac tcagcagagg cagagcgcct caaaaccgaa ggaaacgagc agatgaaagt 420
ggaaaacttt gaagctgccg tgcatttcta cggaaaagcc atcgagctca acccagccaa 480
cgccgtctat ttctgcaaca gagccgcagc ctacagcaaa ctcggcaact acgcaggcgc 540
ggtgcaggac tgtgagcggg ccatctgcat tgacccggcc tacagcaagg cctacggcag 600
gatgggcctg cgcgctctcca gcctcaacaa gcacgtggag gccgtggctt actacaagaa 660
ggctctggag ctggaccccg acaacgagac atacaagtcc aacctcaaga tagcggagct 720
gaagctgcgg gaggccccca gccccacggg aggcgtgggc agcttcgaca tcgccggcct 780
gctgaacaac cctggcttca tgagcatggc ttcgaaccta atgaacaatc cccagattca 840
gcagctcatg tccggcatga tttcgggtgg caacaacccc ttgggaactc ccggcaccag 900
cccctcgcag aacgacctgg ccagcctcat ccaggcgggc cagcagtttg cccagcagat 960
gcagcagcag aacccagagt tgatagagca gctcaggagc cagatccgga gtcggacgcc 1020
cagcgccagc aacgacgacc agcaggagtg acgctgcctg ctcccggtgt gaccgcgtcc 1080
ttccctggcc gacccgaagg aagccttctg gttgtctgcc acttcctcct gttggactgc 1140
ctgagagagg ggaagagaga gacctcggac ctgcatgtca agatggattt tcccctttta 1200
tctctgccct cctccactcc cttttttgtaa ctcccttaca gcccccagac ccttcttgaa 1260

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acgagagcca gcaagctgag cacagaccag cagcgacctc ccttccagcc cccagaaagc 1320
tcggtcactt gagtgttttc tagaatcctg gggtgctccc gggccgctct cagagaagtg 1380
gcaggtttca cgttcagccg tgtggcggat cgtgtggctt ccaaagcctt ttacagcccc 1440
cgccccccat cccgtggtct gtctgcagga actctcccgt ctgtgagaag cctctttccg 1500
agtcgacctc ccggccaccc cggccctgtg cctgctcgga agagctcact gccagctgcg 1560
gcctgggcac cgcgggccat gtgtgtttgc atgaggaact ctttagtggc agacacctaa 1620
gagacggctg cggtcacccc acgcctccgc ggctcaggag ccgtcctggg tgcataggac 1680
cagtttctgt gacttttctc cagttgggca tgttgacaga catgtttccc ctcctcccac 1740
cctcattttc tggtcctcgc gactgagagc caggggcgac atcatgacct tctgtcccgg 1800
ccgccttagc cccgggcaca gggaaggcag ctgggccgtt tctgtctgtg tcccatcctg 1860
ctgtccttct gtcctggatg tttcatgggc ccggggcccc ccaggaagc ttacccctcc 1920
tgtgctgggt ggaggccacg ggacacctca ggtgccaccc accttggccc taaaacagcc 1980
accaggaaag cagccggaga gccggacagc aggcagcctg tctgggttcc tgaggcctgg 2040
gggtggcaga cgagcccacg gcgccgtggt cccagcagca gggttgtcag tcggagcatc 2100
ctggggctcc ctggctcctg gccgtctgtg aggtaggcgc agtaccgtgt atcgtaggta 2160
gcagtaggaa cggggccgc cgcggccctg cagccgctca tggcggtgag gtgtgtgcca 2220
agcccacccg gggtgcaggg cgtgacgtgt ggggaataaa taggcgttgt gacctctaaa 2280
aaaaaaaaaa aaaa                                                 2294
```

<210> 424
<211> 3075
<212> DNA
<213> Homo sapiens

<400> 424

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gaattcggca cgagcagccc tcggctgagc cgcgccgcac catgcccgcc gtggacaagc 60
tcctgctaga ggaggcgttg caggacagcc cccagactcg ctctttactg agcgtgtttg 120
aagaagatgc tggcaccctc acagactata ccaaccagct gctccaggca atgcagcgcg 180
tctatggagc ccagaatgag atgtgcctgg ccacacaaca gctttctaag caactgctgg 240
catatgaaaa acagaacttt gctcttggca aaggtgatga agaagtaatt tcaacactcc 300
actattttc caaagtggtg gatgagctta tcttctcca tacagagctg gctaaacagt 360
tggcagacac aatggttcta cctatcatac aattccgaga aaaggatctc acagaagtaa 420
gcactttaaa ggatctattt ggactcgcta gcaatgagca tgacctctca atggcaaaat 480
acagcaggct gcctaagaaa aaggagaatg agaaggtgaa gaccgaagtc ggaaaagagg 540
tggccgcggc ccggcggaag cagcacctct cctcccttca gtactactgt gccctcaacg 600
cgctgcagta cagaaagcaa atggccatga tggagcccat gataggcttt gcccatggac 660
agattaactt ttttaagaag ggagcagaga tgtttccaa acgtatggac agctttttat 720
cctccgttgc agacatggtt caaagcattc aggtagaact ggaagccgag gcggaaaaga 780
tgcgggtgtc ccagcaagaa ttactttctg ttgatgaatc tgtttacact ccagactctg 840
atgtggccgc accacagatc aacaggaacc tcatccagaa ggctggttac cttaatctta 900
gaaacaaaac agggctggtc accaccacct gggagaggct ttatttcttc acccaaggcg 960
ggaatctcat gtgtcagccc aggggagccg tggctggagg tttgatccag gacctggaca 1020
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ccaatggaaa atcgggaata atcctccagg ctgagagcag aaaggaaaat gaagagtgga 1140
tatgtgcaat aaacaacacc tccagacaga tctacctgac cgacaaccct gaggccgtcg 1200
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acaagattgt tcccaaagca acagccagtc tacctgaagc agaggagctg atcgcgcctg 1380
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acagcactac ttgaagtgat ttatgaagcg atgagacaag tattggctgc tcgggctatt 1620
cataacatct tccgcatgac agaatcccat ctgatggtca ccagtcaatc tttgaggttg 1680
atagatccac agactcaagt atcaagggcc aattttgaac ttaccagtgt cacacaattt 1740
```

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gctgctcatc aagaaaacaa gagactggtt ggttttgtca tccgtgttcc tgaatccact 1800
ggagaagaat ctctgagtac atacattttt gaaagcaact cagaaggcga aaagatatgt 1860
tatgctatta atttgggaaa agaaattatt gaggttcaga aggatccaga agcactggct 1920
caattaatgc tgtccatacc actaaccaat gatggaaaat atgtactgtt aaacgatcaa 1980
ccagatgacg atgatggaaa tccaaatgaa catagaggcg cagaatccga agcataactc 2040
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tctctgacat acaggcacac tgacctgatt tccgaaggct acaatcgtt tgtggaatgt 2160
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taaaatttct tagattgttc agcgctcaga acaaaagttt gaaaaatgca ttgttcatat 2340
gaatgtcatc tcttttcagt ttccagtatc cttttaaaa aatggcaaaa gcctagattt 2400
acaatttgat gaacactaaa tatttcttat taatataatc tattttgta ttttacttaa 2460
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tgcagctcta ccagttcctg tttcttctga gccagaccct cttcagggaa gggaccaatt 2820
aatttttaaaa ctcacttgaa gcacagctgg tcatggggct tggtataaag ttcctattttc 2880
caccctgata cttccaattc ctggaccccc agcccactcc cccatccctc ctccctatca 2940
aactagtata atgattttga atcggtacag tgtgtttaac tgtaactaag ttcaacagac 3000
tattattatc tttgtaataa attaacctag caataaaaat tattctgttt caaaaaaaaa 3060
aaaaaacaac tcgag                                                  3075
```

```
<210> 425
<211> 819
<212> PRT
<213> Homo sapiens

<400> 425
Gly Asp Phe Gly Gly Gly Ser Ser Leu Ala Ala Gly Met Ala Gly Thr
                    5                  10                  15
Val Val Leu Asp Asp Val Glu Leu Arg Glu Ala Gln Arg Asp Tyr Leu
                20                  25                  30
Asp Phe Leu Asp Asp Glu Glu Asp Gln Gly Ile Tyr Gln Ser Lys Val
            35                  40                  45
Arg Glu Leu Ile Ser Asp Asn Gln Tyr Arg Leu Ile Val Asn Val Asn
        50                  55                  60
Asp Leu Arg Arg Lys Asn Glu Lys Arg Ala Asn Arg Leu Leu Asn Asn
65                  70                  75                  80
Ala Phe Glu Glu Leu Val Ala Phe Gln Arg Ala Leu Lys Asp Phe Val
                85                  90                  95
Ala Ser Ile Asp Ala Thr Tyr Ala Lys Gln Tyr Glu Glu Phe Tyr Val
                100                 105                 110
Gly Leu Glu Gly Ser Phe Gly Ser Lys His Val Ser Pro Arg Thr Leu
            115                 120                 125
Thr Ser Cys Phe Leu Ser Cys Val Val Cys Val Glu Gly Ile Val Lys
        130                 135                 140
Cys Ser Leu Val Arg Pro Lys Val Val Arg Ser Val His Tyr Cys Pro
145                 150                 155                 160
Ala Thr Lys Lys Thr Ile Glu Arg Arg Tyr Ser Asp Leu Thr Thr Leu
                165                 170                 175
Val Ala Phe Pro Ser Ser Ser Val Tyr Pro Thr Lys Asp Glu Glu Asn
                180                 185                 190
```

Asn Pro Leu Glu Thr Glu Tyr Gly Leu Ser Val Tyr Lys Asp His Gln
        195   200   205
Thr Ile Thr Ile Gln Glu Met Pro Glu Lys Ala Pro Ala Gly Gln Leu
    210   215   220
Pro Arg Ser Val Asp Val Ile Leu Asp Asp Asp Leu Val Asp Lys Ala
225   230   235   240
Lys Pro Gly Asp Arg Val Gln Val Val Gly Thr Tyr Arg Cys Leu Pro
            245   250   255
Gly Lys Lys Gly Gly Tyr Thr Ser Gly Thr Phe Arg Thr Val Leu Ile
            260   265   270
Ala Cys Asn Val Lys Gln Met Ser Lys Asp Ala Gln Pro Ser Phe Ser
        275   280   285
Ala Glu Asp Ile Ala Lys Ile Lys Lys Phe Ser Lys Thr Arg Ser Lys
        290   295   300
Asp Ile Phe Asp Gln Leu Ala Lys Ser Leu Ala Pro Ser Ile His Gly
305   310   315   320
His Asp Tyr Val Lys Lys Ala Ile Leu Cys Leu Leu Leu Gly Gly Val
            325   330   335
Glu Arg Asp Leu Glu Asn Gly Ser His Ile Arg Gly Asp Ile Asn Ile
            340   345   350
Leu Leu Ile Gly Asp Pro Ser Val Ala Lys Ser Gln Leu Leu Arg Tyr
        355   360   365
Val Leu Cys Thr Ala Pro Arg Ala Ile Pro Thr Thr Gly Arg Gly Ser
    370   375   380
Ser Gly Val Gly Leu Thr Ala Ala Val Thr Thr Asp Gln Glu Thr Gly
385   390   395   400
Glu Arg Arg Leu Glu Ala Gly Ala Met Val Leu Ala Asp Arg Gly Val
            405   410   415
Val Cys Ile Asp Glu Phe Asp Lys Met Ser Asp Met Asp Arg Thr Ala
            420   425   430
Ile His Glu Val Met Glu Gln Gly Arg Val Thr Ile Ala Lys Ala Gly
        435   440   445
Ile His Ala Arg Leu Asn Ala Arg Cys Ser Val Leu Ala Ala Ala Asn
    450   455   460
Pro Val Tyr Gly Arg Tyr Asp Gln Tyr Lys Thr Pro Met Glu Asn Ile
465   470   475   480
Gly Leu Gln Asp Ser Leu Leu Ser Arg Phe Asp Leu Leu Phe Ile Met
            485   490   495
Leu Asp Gln Met Asp Pro Glu Gln Asp Arg Glu Ile Ser Asp His Val
            500   505   510
Leu Arg Met His Arg Tyr Arg Ala Pro Gly Glu Gln Asp Gly Asp Ala
            515   520   525
Met Pro Leu Gly Ser Ala Val Asp Ile Leu Ala Thr Asp Asp Pro Asn
    530   535   540
Phe Ser Gln Glu Asp Gln Gln Asp Thr Gln Ile Tyr Glu Lys His Asp
545   550   555   560
Asn Leu Leu His Gly Thr Lys Lys Lys Glu Lys Met Val Ser Ala
            565   570   575
Ala Phe Met Lys Lys Tyr Ile His Val Ala Lys Ile Ile Lys Pro Val
        580   585   590
Leu Thr Gln Glu Ser Ala Thr Tyr Ile Ala Glu Glu Tyr Ser Arg Leu
        595   600   605
Arg Ser Gln Asp Ser Met Ser Ser Asp Thr Ala Arg Thr Ser Pro Val
    610   615   620

```
Thr Ala Arg Thr Leu Glu Thr Leu Ile Arg Leu Ala Thr Ala His Ala
625             630             635             640
Lys Ala Arg Met Ser Lys Thr Val Asp Leu Gln Asp Ala Glu Glu Ala
            645             650             655
Val Glu Leu Val Gln Tyr Ala Tyr Phe Lys Lys Val Leu Glu Lys Glu
            660             665             670
Lys Lys Arg Lys Lys Arg Ser Glu Asp Glu Ser Glu Thr Glu Asp Glu
            675             680             685
Glu Glu Lys Ser Gln Glu Asp Gln Glu Gln Lys Arg Lys Arg Arg Lys
            690             695             700
Thr Arg Gln Pro Asp Ala Lys Asp Gly Asp Ser Tyr Asp Pro Tyr Asp
705             710             715             720
Phe Ser Asp Thr Glu Glu Glu Met Pro Gln Val His Thr Pro Lys Thr
            725             730             735
Ala Asp Ser Gln Glu Thr Lys Glu Ser Gln Lys Val Glu Leu Ser Glu
            740             745             750
Ser Arg Leu Lys Ala Phe Lys Val Ala Leu Leu Asp Val Phe Arg Glu
            755             760             765
Ala His Ala Gln Ser Ile Gly Met Asn Arg Leu Thr Glu Ser Ile Asn
            770             775             780
Arg Asp Ser Glu Glu Pro Phe Ser Ser Val Glu Ile Gln Ala Ala Leu
785             790             795             800
Ser Lys Met Gln Asp Asp Asn Gln Val Met Val Ser Glu Gly Ile Ile
            805             810             815
Phe Leu Ile
```

<210> 426
<211> 178
<212> PRT
<213> Homo sapiens

<400> 426
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Glu Pro Arg Gly Ser Arg Ala Arg Phe Gly Cys Trp Arg Leu Gln Pro
                5               10              15
Glu Phe Lys Pro Lys Gln Leu Glu Gly Thr Met Ala Asn Cys Glu Arg
            20              25              30
Thr Phe Ile Ala Ile Lys Pro Asp Gly Val Gln Arg Gly Leu Val Gly
            35              40              45
Glu Ile Ile Lys Arg Phe Glu Gln Lys Gly Phe Arg Leu Val Gly Leu
        50              55              60
Lys Phe Met Gln Ala Ser Glu Asp Leu Leu Lys Glu His Tyr Val Asp
65              70              75              80
Leu Lys Asp Arg Pro Phe Phe Ala Gly Leu Val Lys Tyr Met His Ser
                85              90              95
Gly Pro Val Val Ala Met Val Trp Glu Gly Leu Asn Val Val Lys Thr
            100             105             110
Gly Arg Val Met Leu Gly Glu Thr Asn Pro Ala Asp Ser Lys Pro Gly
            115             120             125
Thr Ile Arg Gly Asp Phe Cys Ile Gln Val Gly Arg Asn Ile Ile His
            130             135             140
Gly Ser Asp Ser Val Glu Ser Ala Glu Lys Glu Ile Gly Leu Trp Phe
145             150             155             160
His Pro Glu Glu Leu Val Asp Tyr Thr Ser Cys Ala Gln Asn Trp Ile
```

```
                      165                 170                 175
Tyr Glu


<210> 427
<211> 570
<212> PRT
<213> Homo sapiens


<400> 427
Thr Glu Arg Ser Ala Leu Asp Val Lys Leu Lys His Ala Arg Asn Gln
                 5                  10                  15
Val Asp Val Glu Ile Lys Arg Arg Gln Arg Ala Glu Ala Asp Cys Glu
             20                  25                  30
Lys Leu Glu Arg Gln Ile Gln Leu Ile Arg Glu Met Leu Met Cys Asp
         35                  40                  45
Thr Ser Gly Ser Ile Gln Leu Ser Glu Glu Gln Lys Ser Ala Leu Ala
     50                  55                  60
Phe Leu Asn Arg Gly Gln Pro Ser Ser Ser Asn Ala Gly Asn Lys Arg
 65                  70                  75                  80
Leu Ser Thr Ile Asp Glu Ser Gly Ser Ile Leu Ser Asp Ile Ser Phe
                 85                  90                  95
Asp Lys Thr Asp Glu Ser Leu Asp Trp Asp Ser Ser Leu Val Lys Thr
             100                 105                 110
Phe Lys Leu Lys Lys Arg Glu Lys Arg Arg Ser Thr Ser Arg Gln Phe
         115                 120                 125
Val Asp Gly Pro Pro Gly Pro Val Lys Lys Thr Arg Ser Ile Gly Ser
     130                 135                 140
Ala Val Asp Gln Gly Asn Glu Ser Ile Val Ala Lys Thr Thr Val Thr
145                 150                 155                 160
Val Pro Asn Asp Gly Gly Pro Ile Glu Ala Val Ser Thr Ile Glu Thr
                 165                 170                 175
Val Pro Tyr Trp Thr Arg Ser Arg Arg Lys Thr Gly Thr Leu Gln Pro
             180                 185                 190
Trp Asn Ser Asp Ser Thr Leu Asn Ser Arg Gln Leu Glu Pro Arg Thr
         195                 200                 205
Glu Thr Asp Ser Val Gly Thr Pro Gln Ser Asn Gly Gly Met Arg Leu
     210                 215                 220
His Asp Phe Val Ser Lys Thr Val Ile Lys Pro Glu Ser Cys Val Pro
225                 230                 235                 240
Cys Gly Lys Arg Ile Lys Phe Gly Lys Leu Ser Leu Lys Cys Arg Asp
             245                 250                 255
Cys Arg Val Val Ser His Pro Glu Cys Arg Asp Arg Cys Pro Leu Pro
             260                 265                 270
Cys Ile Pro Thr Leu Ile Gly Thr Pro Val Lys Ile Gly Glu Gly Met
         275                 280                 285
Leu Ala Asp Phe Val Ser Gln Thr Ser Pro Met Ile Pro Ser Ile Val
     290                 295                 300
Val His Cys Val Asn Glu Ile Glu Gln Arg Gly Leu Thr Glu Thr Gly
305                 310                 315                 320
Leu Tyr Arg Ile Ser Gly Cys Asp Arg Thr Val Lys Glu Leu Lys Glu
             325                 330                 335
Lys Phe Leu Arg Val Lys Thr Val Pro Leu Leu Ser Lys Val Asp Asp
         340                 345                 350
```

```
Ile His Ala Ile Cys Ser Leu Leu Lys Asp Phe Leu Arg Asn Leu Lys
        355                 360                 365
Glu Pro Leu Leu Thr Phe Arg Leu Asn Arg Ala Phe Met Glu Ala Ala
        370                 375                 380
Glu Ile Thr Asp Glu Asp Asn Ser Ile Ala Ala Met Tyr Gln Ala Val
385                 390                 395                 400
Gly Glu Leu Pro Gln Ala Asn Arg Asp Thr Leu Ala Phe Leu Met Ile
                405                 410                 415
His Leu Gln Arg Val Ala Gln Ser Pro His Thr Lys Met Asp Val Ala
                420                 425                 430
Asn Leu Ala Lys Val Phe Gly Pro Thr Ile Val Ala His Ala Val Pro
                435                 440                 445
Asn Pro Asp Pro Val Thr Met Leu Gln Asp Ile Lys Arg Gln Pro Lys
        450                 455                 460
Val Val Glu Arg Leu Leu Ser Leu Pro Leu Glu Tyr Trp Ser Gln Phe
465                 470                 475                 480
Met Met Val Glu Gln Glu Asn Ile Asp Pro Leu His Val Ile Glu Asn
                485                 490                 495
Ser Asn Ala Phe Ser Thr Pro Gln Thr Pro Asp Ile Lys Val Ser Leu
                500                 505                 510
Leu Gly Pro Val Thr Thr Pro Glu His Gln Leu Leu Lys Thr Pro Ser
        515                 520                 525
Ser Ser Ser Leu Ser Gln Arg Val Arg Ser Thr Leu Thr Lys Asn Thr
        530                 535                 540
Pro Arg Phe Gly Ser Lys Ser Lys Ser Ala Thr Asn Leu Gly Arg Gln
545                 550                 555                 560
Gly Asn Phe Phe Ala Ser Pro Met Leu Lys
                565                 570
```

```
<210> 428
<211> 532
<212> PRT
<213> Homo sapiens

<400> 428
Leu Leu Asp Ala Gly Pro Gln Phe Pro Ala Ile Gly Val Gly Ser Phe
                5                   10                  15
Ala Arg His His His His Ser Ala Ala Ala Ala Ala Ala Ala Ala
        20                  25                  30
Glu Met Gln Asp Arg Glu Leu Ser Leu Ala Ala Ala Gln Asn Gly Phe
        35                  40                  45
Val Asp Ser Ala Ala Ala His Met Gly Ala Phe Lys Leu Asn Pro Gly
    50                  55                  60
Ala His Glu Leu Ser Pro Gly Gln Ser Ser Ala Phe Thr Ser Gln Gly
65                  70                  75                  80
Pro Gly Ala Tyr Pro Gly Ser Ala Ala Ala Ala Ala Ala Ala Ala Ala
                85                  90                  95
Leu Gly Pro His Ala Ala His Val Gly Ser Tyr Ser Gly Pro Pro Phe
                100                 105                 110
Asn Ser Thr Arg Asp Phe Leu Phe Arg Ser Ala Arg Leu Pro Gly Thr
        115                 120                 125
Ser Ala Pro Gly Gly Gly Gln His Gly Leu Phe Gly Pro Gly Ala Gly
        130                 135                 140
Gly Leu His His Ala His Ser Asp Ala Gln Gly His Leu Leu Phe Pro
```

```
         145                     150                     155                     160
Gly Leu Pro Glu Gln His Gly Pro His Gly Ser Gln Asn Val Leu Asn
                    165                     170             175
Gly Gln Met Arg Leu Gly Leu Pro Gly Glu Val Phe Gly Arg Ser Glu
            180                     185                     190
Gln Tyr Arg Gln Val Ala Ser Pro Arg Thr Asp Pro Tyr Ser Ala Ala
            195                     200                     205
Gln Leu His Asn Gln Tyr Gly Pro Met Asn Met Asn Met Gly Met Asn
        210                     215                     220
Met Ala Ala Ala Ala Ala His His His His His His His His His Pro
225                     230                     235                     240
Gly Ala Phe Phe Arg Tyr Met Arg Gln Gln Cys Ile Lys Gln Glu Leu
                245                     250                     255
Ile Cys Lys Trp Ile Asp Pro Glu Gln Leu Ser Asn Pro Lys Lys Ser
            260                     265                     270
Cys Asn Lys Thr Phe Ser Thr Met His Glu Leu Val Thr His Val Ser
        275                     280                     285
Val Glu His Val Gly Gly Pro Glu Gln Ser Asn His Val Cys Phe Trp
    290                     295                     300
Glu Glu Cys Pro Arg Glu Gly Lys Pro Phe Lys Ala Lys Tyr Lys Leu
305                     310                     315                     320
Val Asn His Ile Arg Val His Thr Gly Glu Lys Pro Phe Pro Cys Pro
                325                     330                     335
Phe Pro Gly Cys Gly Lys Val Phe Ala Arg Ser Glu Asn Leu Lys Ile
                340                     345                     350
His Lys Arg Thr His Thr Gly Glu Lys Pro Phe Gln Cys Glu Phe Glu
                355                     360                     365
Gly Cys Asp Arg Arg Phe Ala Asn Ser Ser Asp Arg Lys Lys His Met
        370                     375                     380
His Val His Thr Ser Asp Lys Pro Tyr Leu Cys Lys Met Cys Asp Lys
385                     390                     395                     400
Ser Tyr Thr His Pro Ser Ser Leu Arg Lys His Met Lys Val His Glu
                405                     410                     415
Ser Ser Pro Gln Gly Ser Glu Ser Ser Pro Ala Ala Ser Ser Gly Tyr
                420                     425                     430
Glu Ser Ser Thr Pro Pro Gly Leu Val Ser Pro Ser Ala Glu Pro Gln
            435                     440                     445
Ser Ser Ser Asn Leu Ser Pro Ala Ala Ala Ala Ala Ala Ala Ala Ala
        450                     455                     460
Ala Ala Ala Ala Ala Ala Val Ser Ala Val His Arg Gly Gly Gly Ser
465                     470                     475                     480
Gly Ser Gly Gly Ala Gly Gly Gly Ser Gly Gly Gly Ser Gly Ser Gly
                485                     490                     495
Gly Gly Gly Gly Gly Ala Gly Gly Gly Gly Gly Gly Ser Ser Gly Gly
            500                     505                     510
Gly Ser Gly Thr Ala Gly Gly His Ser Gly Leu Ser Ser Asn Phe Asn
            515                     520                     525
Glu Trp Tyr Val
    530
```

<210> 429
<211> 629
<212> PRT

<213> Homo sapiens

<400> 429
Gly Gly Ala Pro Ala Ser Phe Pro Gly Arg Ala Pro Arg Ser Leu Ala
                5   10   15
Ser Gln Pro Ala Ala Arg Ala Ala Ala Ala Pro Ala Met Pro Ser Ala
            20   25   30
Lys Gln Arg Gly Ser Lys Gly Gly His Gly Ala Ala Ser Pro Ser Glu
        35   40   45
Lys Gly Ala His Pro Ser Gly Gly Ala Asp Asp Val Ala Lys Lys Pro
    50   55   60
Pro Pro Ala Pro Gln Gln Pro Pro Pro Pro Ala Pro His Pro Gln
65   70   75   80
Gln His Pro Gln Gln His Pro Gln Asn Gln Ala His Gly Lys Gly Gly
            85   90   95
His Arg Gly Gly Gly Gly Gly Gly Lys Ser Ser Ser Ser Ser Ser
            100   105   110
Ala Ser Ala Ala Ala Ala Ala Ala Ala Ser Ser Ser Ala Ser Cys
        115   120   125
Ser Arg Arg Leu Gly Arg Ala Leu Asn Phe Leu Phe Tyr Leu Ala Leu
    130   135   140
Val Ala Ala Ala Ala Phe Ser Gly Trp Cys Val His His Val Leu Glu
145   150   155   160
Glu Val Gln Gln Val Arg Arg Ser His Gln Asp Phe Ser Arg Gln Arg
            165   170   175
Glu Glu Leu Gly Gln Gly Leu Gln Gly Val Glu Gln Lys Val Gln Ser
            180   185   190
Leu Gln Ala Thr Phe Gly Thr Phe Glu Ser Ile Leu Arg Ser Ser Gln
    195   200   205
His Lys Gln Asp Leu Thr Glu Lys Ala Val Lys Gln Gly Glu Ser Glu
    210   215   220
Val Ser Arg Ile Ser Glu Val Leu Gln Lys Leu Gln Asn Glu Ile Leu
225   230   235   240
Lys Asp Leu Ser Asp Gly Ile His Val Val Lys Asp Ala Arg Glu Arg
            245   250   255
Asp Phe Thr Ser Leu Glu Asn Thr Val Glu Glu Arg Leu Thr Glu Leu
            260   265   270
Thr Lys Ser Ile Asn Asp Asn Ile Ala Ile Phe Thr Glu Val Gln Lys
            275   280   285
Arg Ser Gln Lys Glu Ile Asn Asp Met Lys Ala Lys Val Ala Ser Leu
    290   295   300
Glu Glu Ser Glu Gly Asn Lys Gln Asp Leu Lys Ala Leu Lys Glu Ala
305   310   315   320
Val Lys Glu Ile Gln Thr Ser Ala Lys Ser Arg Glu Trp Asp Met Glu
            325   330   335
Ala Leu Arg Ser Thr Leu Gln Thr Met Glu Ser Asp Ile Tyr Thr Glu
    340   345   350
Val Arg Glu Leu Val Ser Leu Lys Gln Glu Gln Gln Ala Phe Lys Glu
    355   360   365
Ala Ala Asp Thr Glu Arg Leu Ala Leu Gln Ala Leu Thr Glu Lys Leu
    370   375   380
Leu Arg Ser Glu Glu Ser Val Ser Arg Leu Pro Glu Glu Ile Arg Arg
385   390   395   400
Leu Glu Glu Glu Leu Arg Gln Leu Lys Ser Asp Ser His Gly Pro Lys

```
                    405                 410                 415
Glu Asp Gly Gly Phe Arg His Ser Glu Ala Phe Glu Ala Leu Gln Gln
            420                 425                 430
Lys Ser Gln Gly Leu Asp Ser Arg Leu Gln His Val Glu Asp Gly Val
            435                 440                 445
Leu Ser Met Gln Val Ala Ser Ala Arg Gln Thr Glu Ser Leu Glu Ser
    450                 455                 460
Leu Leu Ser Lys Ser Gln Glu His Glu Gln Arg Leu Ala Pro Ala Gly
465                 470                 475                 480
Ala Leu Glu Gly Leu Gly Ser Ser Glu Ala Asp Gln Asp Gly Leu Ala
                485                 490                 495
Ser Thr Val Arg Ser Leu Gly Glu Thr Gln Leu Val Leu Tyr Gly Asp
            500                 505                 510
Val Glu Glu Leu Lys Arg Ser Val Gly Glu Leu Pro Ser Thr Val Glu
            515                 520                 525
Ser Leu Gln Lys Val Gln Glu Gln Val His Thr Leu Leu Ser Gln Asp
    530                 535                 540
Gln Ala Gln Ala Ala Arg Leu Pro Pro Gln Asp Phe Leu Asp Arg Leu
545                 550                 555                 560
Ser Ser Leu Asp Asn Leu Lys Ala Ser Val Ser Gln Val Glu Ala Asp
                565                 570                 575
Leu Lys Met Leu Arg Thr Ala Val Asp Ser Leu Val Ala Tyr Ser Val
            580                 585                 590
Lys Ile Glu Thr Asn Glu Asn Asn Leu Glu Ser Ala Lys Gly Leu Leu
            595                 600                 605
Asp Asp Leu Arg Asn Asp Leu Asp Arg Leu Phe Val Lys Val Glu Lys
    610                 615                 620
Ile His Glu Lys Val
625


<210> 430
<211> 147
<212> PRT
<213> Homo sapiens

<400> 430
Pro Gln Trp Cys Pro Arg Ser Gln Ala Arg Ser Ser Ala Ala Ala Ala
                5                   10                  15
Ala Arg Ala Ser Val Pro Leu Arg Gly Ser Pro Gly Pro Ser Ala Ile
            20                  25                  30
Met Pro Met Phe Ile Val Asn Thr Asn Val Pro Arg Ala Ser Val Pro
        35                  40                  45
Asp Gly Phe Leu Ser Glu Leu Thr Gln Gln Leu Ala Gln Ala Thr Gly
    50                  55                  60
Lys Pro Pro Gln Tyr Ile Ala Val His Val Val Pro Asp Gln Leu Met
65                  70                  75                  80
Ala Phe Gly Gly Ser Ser Glu Pro Cys Ala Leu Cys Ser Leu His Ser
                85                  90                  95
Ile Gly Lys Ile Gly Gly Ala Gln Asn Arg Ser Tyr Ser Lys Leu Leu
            100                 105                 110
Cys Gly Leu Leu Ala Glu Arg Leu Arg Ile Ser Pro Asp Arg Val Tyr
            115                 120                 125
Ile Asn Tyr Tyr Asp Met Asn Ala Ala Asn Val Gly Trp Asn Asn Ser
```

```
        130                 135                 140
Thr Phe Ala
145
```

```
<210> 431
<211> 775
<212> PRT
<213> Homo sapiens

<400> 431
Leu Ala Pro Pro Arg Gln Leu Glu Ser Thr Ser Ser Ala Val Arg Leu
                  5                  10                  15
Thr Glu Met Leu Arg Ala Cys Gln Leu Ser Gly Val Thr Ala Ala Ala
                 20                  25                  30
Gln Ser Cys Leu Cys Gly Lys Phe Val Leu Arg Pro Leu Arg Pro Cys
             35                  40                  45
Arg Arg Tyr Ser Thr Ser Gly Ser Ser Gly Leu Thr Thr Gly Lys Ile
         50                  55                  60
Ala Gly Ala Gly Leu Leu Phe Val Gly Gly Gly Ile Gly Gly Thr Ile
 65                  70                  75                  80
Leu Tyr Ala Lys Trp Asp Ser His Phe Arg Glu Ser Val Glu Lys Thr
                 85                  90                  95
Ile Pro Tyr Ser Asp Lys Leu Phe Glu Met Val Leu Gly Pro Ala Ala
                100                 105                 110
Tyr Asn Val Pro Leu Pro Lys Lys Ser Ile Gln Ser Gly Pro Leu Lys
                115                 120                 125
Ile Ser Ser Val Ser Glu Val Met Lys Glu Ser Lys Gln Pro Ala Ser
            130                 135                 140
Gln Leu Gln Lys Gln Lys Gly Asp Thr Pro Ala Ser Ala Thr Ala Pro
145                 150                 155                 160
Thr Glu Ala Ala Gln Ile Ile Ser Ala Ala Gly Asp Thr Leu Ser Val
                165                 170                 175
Pro Ala Pro Ala Val Gln Pro Glu Glu Ser Leu Lys Thr Asp His Pro
                180                 185                 190
Glu Ile Gly Glu Gly Lys Pro Thr Pro Ala Leu Ser Glu Glu Ala Ser
                195                 200                 205
Ser Ser Ser Ile Arg Glu Arg Pro Pro Glu Glu Val Ala Ala Arg Leu
            210                 215                 220
Ala Gln Gln Glu Lys Gln Glu Gln Val Lys Ile Glu Ser Leu Ala Lys
225                 230                 235                 240
Ser Leu Glu Asp Ala Leu Arg Gln Thr Ala Ser Val Thr Leu Gln Ala
                245                 250                 255
Ile Ala Ala Gln Asn Ala Ala Val Gln Ala Val Asn Ala His Ser Asn
                260                 265                 270
Ile Leu Lys Ala Ala Met Asp Asn Ser Glu Ile Ala Gly Glu Lys Lys
                275                 280                 285
Ser Ala Gln Trp Arg Thr Val Glu Gly Ala Leu Lys Glu Arg Arg Lys
            290                 295                 300
Ala Val Asp Glu Ala Ala Asp Ala Leu Leu Lys Ala Lys Glu Glu Leu
305                 310                 315                 320
Glu Lys Met Lys Ser Val Ile Glu Asn Ala Lys Lys Lys Glu Val Ala
                325                 330                 335
Gly Ala Lys Pro His Ile Thr Ala Ala Glu Gly Lys Leu His Asn Met
```

```
              340                      345                      350
Ile Val Asp Leu Asp Asn Val Val Lys Lys Val Gln Ala Ala Gln Ser
          355                      360                      365
Glu Ala Lys Val Val Ser Gln Tyr His Glu Leu Val Val Gln Ala Arg
      370                      375                      380
Asp Asp Phe Lys Arg Glu Leu Asp Ser Ile Thr Pro Glu Val Leu Pro
385                      390                      395                      400
Gly Trp Lys Gly Met Ser Val Ser Asp Leu Ala Asp Lys Leu Ser Thr
              405                      410                      415
Asp Asp Leu Asn Ser Leu Ile Ala His Ala His Arg Arg Ile Asp Gln
          420                      425                      430
Leu Asn Arg Glu Leu Ala Glu Gln Lys Ala Thr Glu Lys Gln His Ile
          435                      440                      445
Thr Leu Ala Leu Glu Lys Gln Lys Leu Glu Glu Lys Arg Ala Phe Asp
      450                      455                      460
Ser Ala Val Ala Lys Ala Leu Glu His His Arg Ser Glu Ile Gln Ala
465                      470                      475                      480
Glu Gln Asp Arg Lys Ile Glu Glu Val Arg Asp Ala Met Glu Asn Glu
              485                      490                      495
Met Arg Thr Gln Leu Arg Arg Gln Ala Ala Ala His Thr Asp His Leu
          500                      505                      510
Arg Asp Val Leu Arg Val Gln Glu Gln Glu Leu Lys Ser Glu Phe Glu
          515                      520                      525
Gln Asn Leu Ser Glu Lys Leu Ser Glu Gln Glu Leu Gln Phe Arg Arg
      530                      535                      540
Leu Ser Gln Glu Gln Val Asp Asn Phe Thr Leu Asp Ile Asn Thr Ala
545                      550                      555                      560
Tyr Ala Arg Leu Arg Gly Ile Glu Gln Ala Val Gln Ser His Ala Val
              565                      570                      575
Ala Glu Glu Glu Ala Arg Lys Ala His Gln Leu Trp Leu Ser Val Glu
          580                      585                      590
Ala Leu Lys Tyr Ser Met Lys Thr Ser Ser Ala Glu Thr Pro Thr Ile
          595                      600                      605
Pro Leu Gly Ser Ala Val Glu Ala Ile Lys Ala Asn Cys Ser Asp Asn
      610                      615                      620
Glu Phe Thr Gln Ala Leu Thr Ala Ala Ile Pro Pro Glu Ser Leu Thr
625                      630                      635                      640
Arg Gly Val Tyr Ser Glu Glu Thr Leu Arg Ala Arg Phe Tyr Ala Val
              645                      650                      655
Gln Lys Leu Ala Arg Arg Val Ala Met Ile Asp Glu Thr Arg Asn Ser
          660                      665                      670
Leu Tyr Gln Tyr Phe Leu Ser Tyr Leu Gln Ser Leu Leu Leu Phe Pro
          675                      680                      685
Pro Gln Gln Leu Lys Pro Pro Pro Glu Leu Cys Pro Glu Asp Ile Asn
      690                      695                      700
Thr Phe Lys Leu Leu Ser Tyr Ala Ser Tyr Cys Ile Glu His Gly Asp
705                      710                      715                      720
Leu Glu Leu Ala Ala Lys Phe Val Asn Gln Leu Lys Gly Glu Ser Arg
              725                      730                      735
Arg Val Ala Gln Asp Trp Leu Lys Glu Ala Arg Met Thr Leu Glu Thr
          740                      745                      750
Lys Gln Ile Val Glu Ile Leu Thr Ala Tyr Ala Ser Ala Val Gly Ile
          755                      760                      765
Gly Thr Thr Gln Val Gln Pro
```

770   775

<210> 432
<211> 741
<212> PRT
<213> Homo sapiens

<400> 432
Arg Pro Lys Arg Leu Arg Thr Gly Asn Met Val Arg Ser Gly Asn Lys
                  5   10   15
Ala Ala Val Val Leu Cys Met Asp Val Gly Phe Thr Met Ser Asn Ser
                 20   25   30
Ile Pro Gly Ile Glu Ser Pro Phe Glu Gln Ala Lys Lys Val Ile Thr
              35   40   45
Met Phe Val Gln Arg Gln Val Phe Ala Glu Asn Lys Asp Glu Ile Ala
           50   55   60
Leu Val Leu Phe Gly Thr Asp Gly Thr Asp Asn Pro Leu Ser Gly Gly
65   70   75   80
Asp Gln Tyr Gln Asn Ile Thr Val His Arg His Leu Met Leu Pro Asp
                 85   90   95
Phe Asp Leu Leu Glu Asp Ile Glu Ser Lys Ile Gln Pro Gly Ser Gln
              100   105   110
Gln Ala Asp Phe Leu Asp Ala Leu Ile Val Ser Met Asp Val Ile Gln
           115   120   125
His Glu Thr Ile Gly Lys Lys Phe Glu Lys Arg His Ile Glu Ile Phe
        130   135   140
Thr Asp Leu Ser Ser Arg Phe Ser Lys Ser Gln Leu Asp Ile Ile Ile
145   150   155   160
His Ser Leu Lys Lys Cys Asp Ile Ser Leu Gln Phe Phe Leu Pro Phe
                 165   170   175
Ser Leu Gly Lys Glu Asp Gly Ser Gly Asp Arg Gly Asp Gly Pro Phe
              180   185   190
Arg Leu Gly Gly His Gly Pro Ser Phe Pro Leu Lys Gly Ile Thr Glu
           195   200   205
Gln Gln Lys Glu Gly Leu Glu Ile Val Lys Met Val Met Ile Ser Leu
        210   215   220
Glu Gly Glu Asp Gly Leu Asp Glu Ile Tyr Ser Phe Ser Glu Ser Leu
225   230   235   240
Arg Lys Leu Cys Val Phe Lys Lys Ile Glu Arg His Ser Ile His Trp
                 245   250   255
Pro Cys Arg Leu Thr Ile Gly Ser Asn Leu Ser Ile Arg Ile Ala Ala
              260   265   270
Tyr Lys Ser Ile Leu Gln Glu Arg Val Lys Lys Thr Trp Thr Val Val
           275   280   285
Asp Ala Lys Thr Leu Lys Lys Glu Asp Ile Gln Lys Glu Thr Val Tyr
        290   295   300
Cys Leu Asn Asp Asp Asp Glu Thr Glu Val Leu Lys Glu Asp Ile Ile
305   310   315   320
Gln Gly Phe Arg Tyr Gly Ser Asp Ile Val Pro Phe Ser Lys Val Asp
                 325   330   335
Glu Glu Gln Met Lys Tyr Lys Ser Glu Gly Lys Cys Phe Ser Val Leu
              340   345   350
Gly Phe Cys Lys Ser Ser Gln Val Gln Arg Arg Phe Phe Met Gly Asn

```
                355                     360                     365
Gln Val Leu Lys Val Phe Ala Ala Arg Asp Asp Glu Ala Ala Ala Val
        370             375                     380
Ala Leu Ser Ser Leu Ile His Ala Leu Asp Asp Leu Asp Met Val Ala
385                     390                     395                 400
Ile Val Arg Tyr Ala Tyr Asp Lys Arg Ala Asn Pro Gln Val Gly Val
                405                     410                     415
Ala Phe Pro His Ile Lys His Asn Tyr Glu Cys Leu Val Tyr Val Gln
                420                     425                     430
Leu Pro Phe Met Glu Asp Leu Arg Gln Tyr Met Phe Ser Ser Leu Lys
                435                     440                     445
Asn Ser Lys Lys Tyr Ala Pro Thr Glu Ala Gln Leu Asn Ala Val Asp
            450                     455                     460
Ala Leu Ile Asp Ser Met Ser Leu Ala Lys Lys Asp Glu Lys Thr Asp
465                     470                     475                 480
Thr Leu Glu Asp Leu Phe Pro Thr Thr Lys Ile Pro Asn Pro Arg Phe
                485                     490                     495
Gln Arg Leu Phe Gln Cys Leu Leu His Arg Ala Leu His Pro Arg Glu
                500                     505                     510
Pro Leu Pro Pro Ile Gln Gln His Ile Trp Asn Met Leu Asn Pro Pro
            515                     520                     525
Ala Glu Val Thr Thr Lys Ser Gln Ile Pro Leu Ser Lys Ile Lys Thr
            530                     535                     540
Leu Phe Pro Leu Ile Glu Ala Lys Lys Lys Asp Gln Val Thr Ala Gln
545                     550                     555                 560
Glu Ile Phe Gln Asp Asn His Glu Asp Gly Pro Thr Ala Lys Lys Leu
                565                     570                     575
Lys Thr Glu Gln Gly Gly Ala His Phe Ser Val Ser Ser Leu Ala Glu
            580                     585                     590
Gly Ser Val Thr Ser Val Gly Ser Val Asn Pro Ala Glu Asn Phe Arg
            595                     600                     605
Val Leu Val Lys Gln Lys Lys Ala Ser Phe Glu Glu Ala Ser Asn Gln
            610                     615                     620
Leu Ile Asn His Ile Glu Gln Phe Leu Asp Thr Asn Glu Thr Pro Tyr
625                     630                     635                 640
Phe Met Lys Ser Ile Asp Cys Ile Arg Ala Phe Arg Glu Glu Ala Ile
                645                     650                     655
Lys Phe Ser Glu Glu Gln Arg Phe Asn Asn Phe Leu Lys Ala Leu Gln
                660                     665                     670
Glu Lys Val Glu Ile Lys Gln Leu Asn His Phe Trp Glu Ile Val Val
                675                     680                     685
Gln Asp Gly Ile Thr Leu Ile Thr Lys Glu Glu Ala Ser Gly Ser Ser
            690                     695                     700
Val Thr Ala Glu Glu Ala Lys Lys Phe Leu Ala Pro Lys Asp Lys Pro
705                     710                     715                 720
Ser Gly Asp Thr Ala Ala Val Phe Glu Glu Gly Gly Asp Val Asp Asp
                725                     730                     735
Leu Leu Asp Met Ile
                740
```

<210> 433
<211> 291
<212> PRT

<213> Homo sapiens

<400> 433
Phe Arg Pro Arg Tyr Glu Gly Arg Gly Arg Gly Cys Cys Gly Arg Val
                  5   10   15
Leu Leu Leu Arg Arg Gly Leu His Val Asp Cys Gly Lys Leu Gly Asn
                 20   25   30
Lys Leu Thr Ser Ser Cys Gly Lys Pro Ser Ser Asn Arg Met Ser Leu
             35   40   45
Gln Trp Thr Ala Val Ala Thr Phe Leu Tyr Ala Glu Val Phe Val Val
         50   55   60
Leu Leu Leu Cys Ile Pro Phe Ile Ser Pro Lys Arg Trp Gln Lys Ile
65   70   75   80
Phe Lys Ser Arg Leu Val Glu Leu Leu Val Ser Tyr Gly Asn Thr Phe
                 85   90   95
Phe Val Val Leu Ile Val Ile Leu Val Leu Leu Val Ile Asp Ala Val
            100   105   110
Arg Glu Ile Arg Lys Tyr Asp Asp Val Thr Glu Lys Val Asn Leu Gln
            115   120   125
Asn Asn Pro Gly Ala Met Glu His Phe His Met Lys Leu Phe Arg Ala
        130   135   140
Gln Arg Asn Leu Tyr Ile Ala Gly Phe Ser Leu Leu Leu Ser Phe Leu
145   150   155   160
Leu Arg Arg Leu Val Thr Leu Ile Ser Gln Gln Ala Thr Leu Leu Ala
                165   170   175
Ser Asn Glu Ala Phe Lys Lys Gln Ala Glu Ser Ala Ser Glu Ala Ala
            180   185   190
Lys Lys Tyr Met Glu Glu Asn Asp Gln Leu Lys Lys Gly Ala Ala Val
            195   200   205
Asp Gly Gly Lys Leu Asp Val Gly Asn Ala Glu Val Lys Leu Glu Glu
        210   215   220
Glu Asn Arg Ser Leu Lys Ala Asp Leu Gln Lys Leu Lys Asp Glu Leu
225   230   235   240
Ala Ser Thr Lys Gln Lys Leu Glu Lys Ala Glu Asn Gln Val Leu Ala
            245   250   255
Met Arg Lys Gln Ser Glu Gly Leu Thr Lys Glu Tyr Asp Arg Leu Leu
            260   265   270
Glu Glu His Ala Lys Leu Gln Ala Ala Val Asp Gly Pro Met Asp Lys
        275   280   285
Lys Glu Glu
        290

<210> 434
<211> 349
<212> PRT
<213> Homo sapiens

<400> 434
Gly Val Ala Pro Trp Gly Arg Gly Arg Ala Ala Pro Arg Cys Ala Ser
                  5   10   15
Ala Thr Val Gly Gly Ser Gly Ile Gly Arg Leu Arg Gly Ile Thr Ser
                 20   25   30
Ser Gly Leu Lys Met Asp Asn Lys Lys Arg Leu Ala Tyr Ala Ile Ile

```
         35                      40                      45
Gln Phe Leu His Asp Gln Leu Arg His Gly Gly Leu Ser Ser Asp Ala
     50                      55                      60
Gln Glu Ser Leu Glu Val Ala Ile Gln Cys Leu Glu Thr Ala Phe Gly
 65                      70                      75                      80
Val Thr Val Glu Asp Ser Asp Leu Ala Leu Pro Gln Thr Leu Pro Glu
                     85                      90                      95
Ile Phe Glu Ala Ala Ala Thr Gly Lys Glu Met Pro Gln Asp Leu Arg
                 100                     105                     110
Ser Pro Ala Arg Thr Pro Pro Ser Glu Glu Asp Ser Ala Glu Ala Glu
                 115                     120                     125
Arg Leu Lys Thr Glu Gly Asn Glu Gln Met Lys Val Glu Asn Phe Glu
             130                     135                     140
Ala Ala Val His Phe Tyr Gly Lys Ala Ile Glu Leu Asn Pro Ala Asn
145                     150                     155                     160
Ala Val Tyr Phe Cys Asn Arg Ala Ala Ala Tyr Ser Lys Leu Gly Asn
                 165                     170                     175
Tyr Ala Gly Ala Val Gln Asp Cys Glu Arg Ala Ile Cys Ile Asp Pro
             180                     185                     190
Ala Tyr Ser Lys Ala Tyr Gly Arg Met Gly Leu Ala Leu Ser Ser Leu
             195                     200                     205
Asn Lys His Val Glu Ala Val Ala Tyr Tyr Lys Lys Ala Leu Glu Leu
         210                     215                     220
Asp Pro Asp Asn Glu Thr Tyr Lys Ser Asn Leu Lys Ile Ala Glu Leu
225                     230                     235                     240
Lys Leu Arg Glu Ala Pro Ser Pro Thr Gly Gly Val Gly Ser Phe Asp
                 245                     250                     255
Ile Ala Gly Leu Leu Asn Asn Pro Gly Phe Met Ser Met Ala Ser Asn
             260                     265                     270
Leu Met Asn Asn Pro Gln Ile Gln Gln Leu Met Ser Gly Met Ile Ser
         275                     280                     285
Gly Gly Asn Asn Pro Leu Gly Thr Pro Gly Thr Ser Pro Ser Gln Asn
         290                     295                     300
Asp Leu Ala Ser Leu Ile Gln Ala Gly Gln Gln Phe Ala Gln Gln Met
305                     310                     315                     320
Gln Gln Gln Asn Pro Glu Leu Ile Glu Gln Leu Arg Ser Gln Ile Arg
             325                     330                     335
Ser Arg Thr Pro Ser Ala Ser Asn Asp Asp Gln Gln Glu
         340                     345
```

```
<210> 435
<211> 519
<212> PRT
<213> Homo sapiens

<400> 435
Gln Pro Ser Ala Glu Pro Arg Arg Thr Met Pro Ala Val Asp Lys Leu
                     5                      10                      15
Leu Leu Glu Glu Ala Leu Gln Asp Ser Pro Gln Thr Arg Ser Leu Leu
             20                      25                      30
Ser Val Phe Glu Glu Asp Ala Gly Thr Leu Thr Asp Tyr Thr Asn Gln
     35                      40                      45
Leu Leu Gln Ala Met Gln Arg Val Tyr Gly Ala Gln Asn Glu Met Cys
```

```
         50                      55                      60
Leu Ala Thr Gln Gln Leu Ser Lys Gln Leu Leu Ala Tyr Glu Lys Gln
 65                      70                      75                      80
Asn Phe Ala Leu Gly Lys Gly Asp Glu Glu Val Ile Ser Thr Leu His
                     85                      90                      95
Tyr Phe Ser Lys Val Val Asp Glu Leu Asn Leu Leu His Thr Glu Leu
                    100                     105                     110
Ala Lys Gln Leu Ala Asp Thr Met Val Leu Pro Ile Ile Gln Phe Arg
                    115                     120                     125
Glu Lys Asp Leu Thr Glu Val Ser Thr Leu Lys Asp Leu Phe Gly Leu
        130                     135                     140
Ala Ser Asn Glu His Asp Leu Ser Met Ala Lys Tyr Ser Arg Leu Pro
145                     150                     155                     160
Lys Lys Lys Glu Asn Glu Lys Val Lys Thr Glu Val Gly Lys Glu Val
                    165                     170                     175
Ala Ala Ala Arg Arg Lys Gln His Leu Ser Ser Leu Gln Tyr Tyr Cys
                    180                     185                     190
Ala Leu Asn Ala Leu Gln Tyr Arg Lys Gln Met Ala Met Met Glu Pro
                    195                     200                     205
Met Ile Gly Phe Ala His Gly Gln Ile Asn Phe Phe Lys Lys Gly Ala
        210                     215                     220
Glu Met Phe Ser Lys Arg Met Asp Ser Phe Leu Ser Ser Val Ala Asp
225                     230                     235                     240
Met Val Gln Ser Ile Gln Val Glu Leu Glu Ala Glu Ala Glu Lys Met
                    245                     250                     255
Arg Val Ser Gln Gln Glu Leu Leu Ser Val Asp Glu Ser Val Tyr Thr
                    260                     265                     270
Pro Asp Ser Asp Val Ala Ala Pro Gln Ile Asn Arg Asn Leu Ile Gln
                    275                     280                     285
Lys Ala Gly Tyr Leu Asn Leu Arg Asn Lys Thr Gly Leu Val Thr Thr
        290                     295                     300
Thr Trp Glu Arg Leu Tyr Phe Phe Thr Gln Gly Gly Asn Leu Met Cys
305                     310                     315                     320
Gln Pro Arg Gly Ala Val Ala Gly Gly Leu Ile Gln Asp Leu Asp Asn
                    325                     330                     335
Cys Ser Val Met Ala Val Asp Cys Glu Asp Arg Arg Tyr Cys Phe Gln
                    340                     345                     350
Ile Thr Thr Pro Asn Gly Lys Ser Gly Ile Ile Leu Gln Ala Glu Ser
                    355                     360                     365
Arg Lys Glu Asn Glu Glu Trp Ile Cys Ala Ile Asn Asn Thr Ser Arg
                    370                     375                     380
Gln Ile Tyr Leu Thr Asp Asn Pro Glu Ala Val Ala Ile Lys Leu Asn
385                     390                     395                     400
Gln Thr Ala Leu Gln Ala Val Thr Pro Ile Thr Ser Phe Gly Lys Lys
                    405                     410                     415
Gln Glu Ser Ser Cys Pro Ser Gln Asn Leu Lys Asn Ser Glu Met Glu
                    420                     425                     430
Asn Glu Asn Asp Lys Ile Val Pro Lys Ala Thr Ala Ser Leu Pro Glu
                    435                     440                     445
Ala Glu Glu Leu Ile Ala Pro Gly Thr Pro Ile Gln Phe Asp Ile Val
        450                     455                     460
Leu Pro Ala Thr Glu Phe Leu Asp Gln Asn Arg Gly Ser Arg Arg Thr
465                     470                     475                     480
Asn Pro Phe Gly Glu Thr Glu Asp Glu Ser Phe Pro Glu Ala Glu Asp
```

```
                          485               490                 495
Ser Leu Leu Gln Gln Met Phe Ile Val Arg Phe Leu Gly Ser Met Ala
                500               505               510
Val Lys Thr Asp Ser Thr Thr
                515


<210> 436
<211> 357
<212> PRT
<213> Homo sapiens

<400> 436
Met Leu Gln Ile His Leu Pro Gly Arg His Thr Leu Phe Val Arg Ala
                     5               10                  15
Met Ile Asp Ser Gly Ala Ser Gly Asn Phe Ile Asp His Glu Tyr Val
                20               25                  30
Ala Gln Asn Gly Ile Pro Leu Arg Ile Lys Asp Trp Pro Ile Leu Val
            35                   40                  45
Glu Ala Ile Asp Gly Arg Pro Ile Ala Ser Gly Pro Val Val His Glu
       50                   55                  60
Thr His Asp Leu Ile Val Asp Leu Gly Asp His Arg Glu Val Leu Ser
   65                   70                   75                  80
Phe Asp Val Thr Gln Ser Pro Phe Phe Pro Val Val Leu Gly Val Arg
                    85                   90                  95
Trp Leu Ser Thr His Asp Pro Asn Ile Thr Trp Ser Thr Arg Ser Ile
                100                  105                 110
Val Phe Asp Ser Glu Tyr Cys Arg Tyr His Cys Arg Met Tyr Ser Pro
            115                  120                 125
Ile Pro Pro Ser Leu Pro Pro Pro Ala Pro Gln Pro Pro Leu Tyr Tyr
        130                  135                 140
Pro Val Asp Gly Tyr Arg Val Tyr Gln Pro Val Arg Tyr Tyr Tyr Val
    145                  150                  155                 160
Gln Asn Val Tyr Thr Pro Val Asp Glu His Val Tyr Pro Asp His Arg
                165                  170                 175
Leu Val Asp Pro His Ile Glu Met Ile Pro Gly Ala His Ser Ile Pro
                180                  185                 190
Ser Gly His Val Tyr Ser Leu Ser Glu Pro Glu Met Ala Ala Leu Arg
            195                  200                 205
Asp Phe Val Ala Arg Asn Val Lys Asp Gly Leu Ile Thr Pro Thr Ile
        210                  215                 220
Ala Pro Asn Gly Ala Gln Val Leu Gln Val Lys Arg Gly Trp Lys Leu
    225                  230                  235                 240
Gln Val Ser Tyr Asp Cys Arg Ala Pro Asn Asn Phe Thr Ile Gln Asn
                245                  250                 255
Gln Tyr Pro Arg Leu Ser Ile Pro Asn Leu Glu Asp Gln Ala His Leu
                260                  265                 270
Ala Thr Tyr Thr Glu Phe Val Pro Gln Ile Pro Gly Tyr Gln Thr Tyr
            275                  280                 285
Pro Thr Tyr Ala Ala Tyr Pro Thr Tyr Pro Val Gly Phe Ala Trp Tyr
        290                  295                 300
Pro Val Gly Arg Asp Gly Gln Gly Arg Ser Leu Tyr Val Pro Val Met
    305                  310                  315                 320
Ile Thr Trp Asn Pro His Trp Tyr Arg Gln Pro Pro Val Pro Gln Tyr
```

```
              325              330              335
Pro Pro Pro Gln Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro
            340              345              350
Ser Tyr Ser Thr Leu
        355
```

<210> 437
<211> 501
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 437
```
cgcaccagct ctctgctctc ccagcgcagc gccgccgccc ggcccctcca gcttcccgga      60
ccatggccaa cctggagcgc accttcatcg ccatcaagcc ggacggcgtg cagcgcggcc     120
tggtgggcga gatcatcaag cgcttcgagc agaagggatt ccgcctcgtg gccatgaagt     180
tcctccgggc ctctgaagaa cacctgaagc agcactacat tgacctgaaa gaccgaccat     240
tcttccctgg gctggtgaag tacatgaact cagggccggt tgtggccatg gtctgggagg     300
ggctgaacgt ggtgaagaca ggccgagtga tgcttgggga gaccaatcca gcagattcaa     360
agccaggcac cattcgtggg gacttctgca ttcaggttgg caggaacatc attcatggca     420
gtgattcagt aaaaagtgct gaaaagaaa tcancctatg gtttaagcct gaanaactgg     480
ttgactacaa gtcttgtgct c                                              501
```

<210> 438
<211> 501
<212> DNA
<213> Homo sapiens

<400> 438
```
tgaaatactg gagctgttgt agaagaaaaa cttctgattt taatacattc ttagcccaag      60
agggctgtac aaaagggaaa cacatgtgga ctaaaaaga tgctgggaaa aaagttgttc     120
catgtagaca tgactggcat cagactggag ggtgaaagtt ccatttcagt atatgctaaa     180
aactcacttc cagaacttag ccgagtagaa gcaaatagca cattgttaaa tgtgcatatt     240
gtatttgaag gagagaagga atttgatcaa aatgtgaaat tatggggtgt gattgatgta     300
aagcgaagtt atgtaactat gactgcaaca aagattgaaa tcactatgag aaaagctgaa     360
ccgatgcagt gggcaagcct tgaactgcct gcagctaaaa agcaggaaaa acaaaaagat     420
gacacaacag attgagtggg agatggaagg aaggctatta cattatttcc gaatttttaa     480
tactgtgtga agtggtgggc t                                              501
```

<210> 439
<211> 501
<212> DNA
<213> Homo sapiens

<400> 439
```
taaaacaagc acttgataaa cttaaactgt catcagggaa tgaagaaaat aagaaagaag      60
aagacaatga tgaaattaag attgggacct catgtaagaa tggagggtgt tcaaagacat     120
accagggtct agagagtcta gaagaagtct gtgtatatca ttctggagta cctattttcc     180
```

```
atgaggggat gaaatactgg agctgttgta gaagaaaaac ttctgatttt aatacattct    240
tagcccaaga gggctgtaca aaagggaaac acatgtggac taaaaaagat gctgggaaaa    300
aagttgttcc atgtagacat gactggcatc agactggagg tgaagttacc atttcagtat    360
atgctaaaaa ctcacttcca gaacttagcc cgagtagaag caaatagcac attgttaaat    420
gtgcatattg tatttgaagg agagaaggaa tttgatcaaa atgtgaaatt atggggtgtg    480
attgatgtaa agcgaattat t                                             501
```

```
<210> 440
<211> 481
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(481)
<223> n = A,T,C or G

<400> 440
tgatccctat tgttttgtgg agtttcatga gcatcgtcat gcagctgcag cattagctgc     60
tatgaatgga cggaagataa tgggtaagga agtcaaagtg aattgggcaa caacccctag    120
cagtcaaaag aaagatacaa gcaatcattt ccatgtcttt gttggtgatc tcagcccaga    180
aattacaact gaagatataa aagctgcttt tgcaccattt ggaagaatat cagatgcccg    240
agtggtaaaa gacatggcaa caggaaagtc taagggatat ggctttgtct ccttttttcaa    300
caaatgggat gctgaaaacg ccattcaaca gatgggtggc cagtggcttg gtggaagaca    360
aatcagaact aactgggcaa cccgaaagcc tcccgctcca aagagtacat atgagtcaaa    420
taccaaacag ctatcatatg atganggtgt aaatcagtct aatccaagca actgtctgta    480
t                                                                   481
```